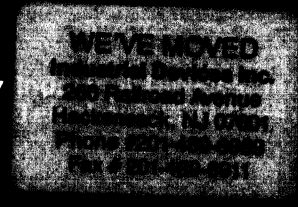
# THE SOURCE FOR INDICATOR LIGHTS




.. Edgewater, New Jersey 07020
00

# THE SOURCE FOR INDICATOR LIGHTS

EDs — LEDs

EON GLOW LAMPS — NEON

ELAMPABLE INDICATOR LIGHTS — RELAMPABLE

ON-RELAMPABLE INDICATOR LIGHTS — NON-RELAMPABLE

TANDARD VARIATIONS — STANDARD VARIATIONS

I CROSS REFERENCE — CROSS REFERENCE

Industrial Devices, Inc., Edgewater, NJ 07020 • (201) 224-4700 Telex: 127459 Fax: 201 224 9095

TABLE OF CONTENTS

# OFF-THE-SHELF-SECTION



## LEDs



## NEON GLOW LAMPS



## RELAMPABLE INDICATOR LIGHTS



## NON-RELAMPABLE INDICATOR LIGHTS

TABLE OF CONTENTS

# STANDARD VARIATIONS SECTION

# USER'S GUIDE TO INDICATOR LIGHTS

## SMART ENGINEERS BEGIN HERE.

This comprehensive technical guide is intended to provide you with much more information than just a catalog. It contains everything necessary to provide the finest quality, most cost-effective solution to any indicator light need. Inside you'll find:

**The largest selection of LED, relampable and non-relampable indicators available** — in off-the-shelf, standard variations and customized styles.

**Money-saving packaged solutions** for faster assembly, labor savings, improved design integrity and better board and panel appearance.

**Expert applications advice** with recommendations on how, when and where to select the best type of indicator for your design.

## AVAILABLE RIGHT OFF THE SHELF:

Panel Mounted LED indicators — A complete stock, offering time-saving snap-fit mounting, excellent economy and attractive appearance. Ultra-high intensity SUPER-BRITE and dual color styles available.

PC Board Mounted LED Indicators — Fast, press-in mounting SUPER-BRITE LEDs. Attractive, high contrast and economical in a full range of styles. Greatly simplifies alignment; assures mechanical protection; saves installation time.

Relampable Indicators — **Tiny-Mite** assemblies and sockets for excellent, shock-resistant board contact and easy lamp replacement. Extremely rugged and reliable, require minimum board space. **Mini-Slide** pilot light assemblies offer fast, secure installation and relamping in seven bright colors; individual and multisocket strips; long-life economy.

Non-relampable Indicators—Outstanding reliability with no sockets or spring contacts. Fast, labor-saving installation. Complete range of LED, neon and incandescent styles for hundreds of line and low-voltage applications.

## FOR STANDARD VARIATIONS:

Turn to page 156 if our off-the-shelf selection doesn't exactly meet your needs. Variations are an IDI specialty. We'll readily make modifications, whether for a simple change in lead length or substantial repackaging to meet your requirements.

## FOR CUSTOM PRODUCTS:

IDI customizing capability can usually solve any other application need, and do it at a surprisingly low cost. A wide variety of examples of IDI engineering and design innovations are on pages 172-173.

## WHERE TO BUY:

All of the models listed in this catalog are available, at factory-direct prices, through IDI authorized distributors. By authorizing a limited number of distributors we are able to assure local inventory of the most popular models listed in this catalog, and prompt service for all IDI indicator lights, LEDs, and sockets.

## QUANTITIES:

Should you have difficulty in locating an authorized distributor in your area, or if you need help in obtaining any model listed in this catalog, call IDI direct. We'll also be happy to quote on quantities larger than those covered by our suggested price schedule. Please call (201) 224-4700.

# LAMPS USED IN IDI INDICATOR LIGHT ASSEMBLIES

**SOLID-STATE LAMP NOTES:** Rectifier diode may also be supplied to protect against accidental damage due to reverse polarity dc as well as for use on ac.

Because light-emitting diodes normally outlast the products on which they are used, they may be wired permanently into your circuitry.

**NEON LAMP NOTES:** Resistors are usually selected to limit current to 2 mA for high brightness lamps and .5 mA for standard brightness types. Exact resistance value will depend on service voltage and lamp.

At these current levels, lamp life will average 10,000 hours with the lights outlasting most devices operating on an intermittant basis, such as household appliances. For applications which require longer life higher resistance values can be supplied to provide lamp life of over 25,000 hours or over 50,000 hours with a modest decrease in light output at each step.

Typical applications of extended-life units include indicator lights for emergency lights, alarm systems, and industrial equipment. In these applications where the lamp will be lit for prolonged periods, or even full time, long-life units provide reliable operation for many years.

**INCANDESCENT LAMP NOTES:** All incandescent lamps contain a filament which is susceptible to damage from shock or vibration or voltage transients. In general the higher the voltage — or the lower the current at a given voltage — the more fragile the filament.

Accordingly, when shock or vibration are present and an incandescent lamp must be used, choose the lowest supply voltage available. Try to isolate the lamps as far as possible from the vibration source — cushioning will help.

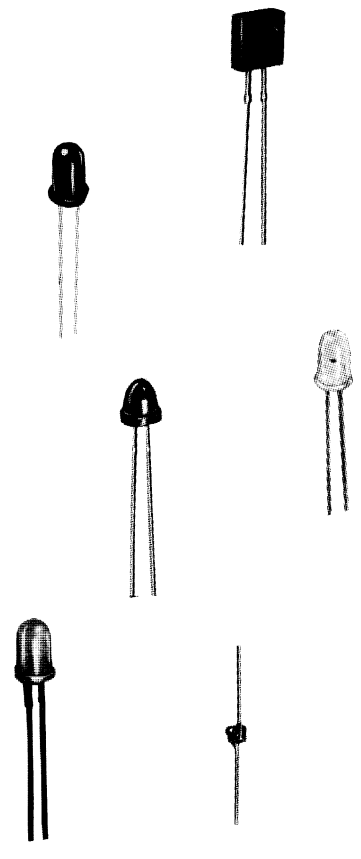
Incandescent lamps should not be connected across inductive loads, such as the coil of a relay or solenoid, without some sort of filter to prevent voltage transients from damaging the filament. It is also helpful in all cases to derate the lamp — use it below rated voltage — which will reduce light output but greatly extend lamp life. A 28-volt lamp, for example, has over five times rated life when operated at 24 volts.

We will be happy to suggest lamps for specific incandescent applications. However, it is important to test the indicator light in your application to ensure satisfactory performance. Lamp life ratings, while useful as a general guide, are often misleading since they are based on static (vibration-free) conditions.

# LAMPS USED IN IDI INDICATOR LIGHT ASSEMBLIES

| | SOLID STATE | GLOW | INCANDESCENT |
|---|---|---|---|
| |  (LED) |  (NEON) |  (FILAMENT) |
| **Total light output** | Relatively low, Red, amber, green, yellow. | Relatively low. Amber-red color, green, blue, orange also available. | Low to high, depending on lamp. Generally white light. |
| **Operating voltage** | 2.5V and up. | 65Vac, 90Vdc for standard brightness types; 95Vac, 135Vdc and up for high-brightness. | 1V to 120V (Operation generally not recommended above 24V for non-relampable assemblies). |
| **Operating current** | .002 to .040A. Normal operation at .015 to .025A. | .0003 to .005A, depending on lamp. | From .015A up, depending on lamp. |
| **Ballast required (current-limiting resistor)** | Yes. Rectifier diode also required for ac service. | Yes. Normally built into housing or installed in one lead for non-relampable assemblies. | No. (Voltage-dropping resistor sometimes used). |
| **Life** | 100,000 + hours. | Minimum 5000 hours. up to 50,000 + depending on current. | Depends on lamp life rating and conditions of use. |
| **Resistance to vibration, shock, voltage transients** | Very high. | Very high. | Low to moderate, depending on lamp, type of shock. |
| **Cost** | Moderate. | Low. | Low to high, depending on lamp. |
| **Typical applications** | Battery operated devices with integrated circuits, low current applica-. tions. | Line-voltage operated appliances, instruments. | Very broad range. |

# LEDs



IDI LEDs are supplied three ways:

- bare LEDs
- in assemblies for panel mounting
- in assemblies for mounting on printed circuit boards

LEDs are rugged and extremely long-lived. When properly used in the circuit, no special provision for replacement is necessary since the LED will outlast most other components.

The designer using LEDs should be aware of factors which will shorten life. The most common circuit problem is reverse transients exceeding the LED peak inverse

# LEDs INTRODUCTION



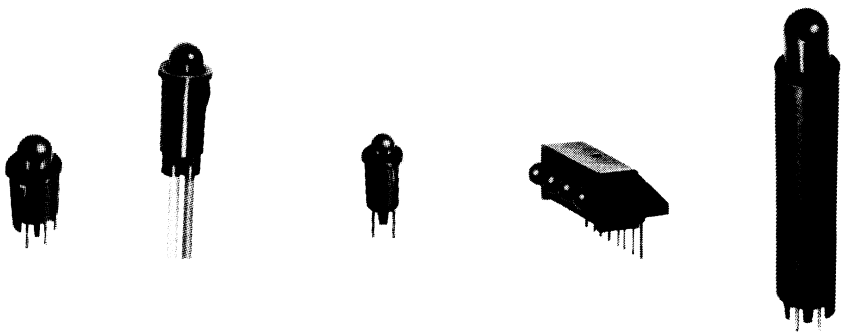
voltage rating. If these cannot be prevented the LED can be protected by a rectifier diode. The most frequent non-electrical source of failure is excessive heat.

LEDs are ideal for use in low-voltage circuits, and because of their low voltage and current requirements they can often be used directly with integrated circuits.

IDI LEDs and LED assemblies provide the designer with a wide assortment of innovative, attractive and economical packages. In addition, we offer lenses and mounting clips to aid the designer in utilizing IDI bare LEDs.

IDI ULTRA **EXTRA-SUPER-BRITE** LEDs feature highest-intensity light output in clear dome narrow-beam LEDs—up to 1000 mcd! IDI **SUPER-BRITE** LEDs are available in both wide angle and narrow-beam versions and are used in most IDI off-the-shelf LED assemblies. IDI **BRITE** LEDs have high light output and are for use where economy is more important than achieving highest brightness.

In addition to the models shown in this catalog, many variations are available; and new designs are in process to provide solutions to tomorrow's packaging needs.



# BARE LEDs

A wide variety of top-quality LEDs in a variety of sizes and package styles.

All IDI LEDs provide bright, unmistakable indication **SUPER-BRITE** LEDs are GaAsP on GaP for red and yellow, **EXTRA-SUPER-BRITE** (series) are ultra bright LEDs utilizing GaAl as construction for red, GaAsP on GaP for amber, and high-efficiency GaP for yellow and green.

"LC" LEDs are high efficiency types available in read and yellow, require only 2 mA, ideal for battery-operated devices and limited-current power supplies.

"−5V" LEDs have a current-limiting resistor on the chip, are TTL compatible — require no external current-limiting resistors.

"/"LEDs incorporate two separate chips connected in parallel but with opposite polarity. Red/green (1/5) allows one LED to signal two different conditions (plus off). Red/red (1/1) and green/green (5/5) bi-polar LEDs are ideal for use on AC or on DC where polarity cannot readily be identified.

IDI LEDs are available as components, and also in a variety of panel-mounted and printed circuit-board mounted assemblies.

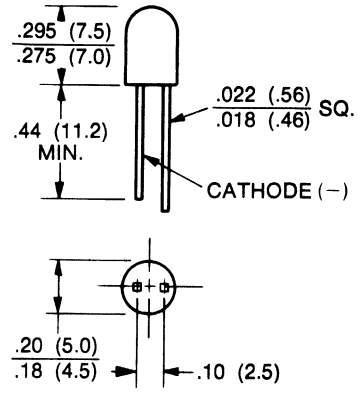
# SERIES 4300E

## FEATURES

T-1¾ **BRITE** LEDs

- Good light output
- Wide viewing angle
- Economical

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4300E1NF | 4300E5NF | 4300E7NF |
|---|---|---|---|---|
| **Output Color** | | Red | Green | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused | Diffused |
| **Package Color** | | Red | Green | Yellow |
| **Viewing Angle** | DEG. | 70 | 70 | 70 |
| **Min. Lum. Intensity @ Rated Current** | mcd | .5 | 3.0 | 2.0 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 2 | 12 | 11 |
| **Rated Current** | mA | 20 | 20 | 20 |
| **Forward Voltage — Typ.** | V | 1.7 | 2.2 | 2.1 |
| **Forward Voltage — Max.** | V | 2.2 | 3.0 | 3.0 |
| **Continuous Forward Current, Max.** | mA | 100 | 100 | 100 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | 1.0 | .09 | 1.0 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 | 5 |
| **Peak Wave Length** | nm | 660 | 567 | 585 |
| **Dissipation Max. @ 25°C** | mW | 105 | 105 | 105 |
| **Derate Linearly from 25°C** | mW/°C | 1.14 | 1.14 | 1.14 |
| **Capacitance @ V = O** | P.F. | 25 | 20 | 45 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — |

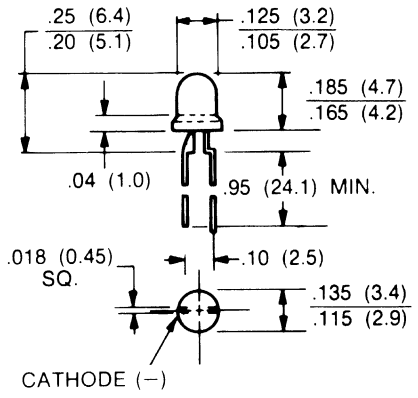
# MODEL 4300F1

## FEATURES

T-1 **BRITE** RED LED

- Good light output
- Wide viewing angle
- Economical

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4300F1 |
|---|---|---|
| **Output Color** | | Red |
| **Diffused — Non Diffused** | | Diffused |
| **Package Color** | | Red |
| **Viewing Angle** | DEG. | 125 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 0.5 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 1.0 |
| **Rated Current** | mA | 20 |
| **Forward Voltage — Typ.** | V | 1.6 |
| **Forward Voltage — Max.** | V | 2.0 |
| **Continuous Forward Current, Max.** | mA | 50 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | 1.0 |
| **Reverse Breakdown Voltage (Min.)** | V | 3 |
| **Peak Wave Length** | nm | 655 |
| **Dissipation Max. @ 25°C** | mW | 100 |
| **Derate Linearly from 25°C** | mW/°C | — |
| **Capacitance @ V = O** | P.F. | 100 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — |

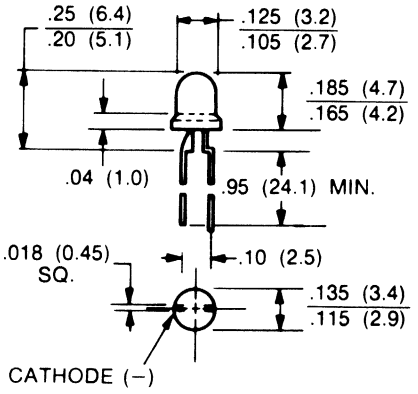
# MODELS 4300F1LC, 4300F7LC

## FEATURES

T-1 **BRITE** LEDs

- Require only 2 mA!
- Ideal for limited-current power supplies

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

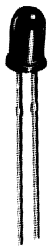
| | UNITS | 4300F1LC | 4300F7LC |
|---|---|---|---|
| Output Color | | Red | Yellow |
| Diffused — Non Diffused | | Diffused | Diffused |
| Package Color | | Red | Yellow |
| Viewing Angle | DEG. | 50 | 50 |
| Min. Lum. Intensity @ Rated Current | mcd | 1.0 | 1.0 |
| Typ. Lum. Intensity @ Rated Current | mcd | 1.8 | 1.8 |
| Rated Current | mA | 2 | 2 |
| Forward Voltage — Typ. | V | 1.8 | 1.9 |
| Forward Voltage — Max. | V | 2.2 | 2.7 |
| Continuous Forward Current, Max. | mA | 7 | 7 |
| Peak Forward Current @ 1 Ms — 300 PPS | A | .007 | .007 |
| Reverse Breakdown Voltage (Min.) | V | 5 | 5 |
| Peak Wave Length | nm | 635 | 583 |
| Dissipation Max. @ 25°C | mW | 27 | 24 |
| Derate Linearly from 25°C | mW/°C | — | — |
| Capacitance @ V = O | P.F. | 4 | 4 |
| Forward Current @ $V_F$ = 5V Typ. | mA | — | — |
| Forward Current @ $V_F$ = 5V Max. | mA | — | — |

# MODEL 4300H1

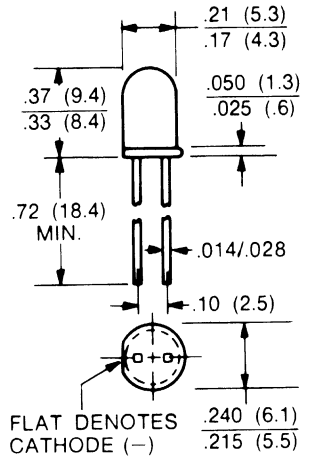
## FEATURES

T-1¾ **BRITE** RED LED

- Wide viewing angle
- Economical



## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

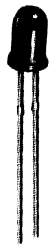
| | UNITS | 4300H1 |
|---|---|---|
| **Output Color** | | Red |
| **Diffused — Non Diffused** | | Diffused |
| **Package Color** | | Red |
| **Viewing Angle** | DEG. | 80 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 0.5 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 1.6 |
| **Rated Current** | mA | 20 |
| **Forward Voltage — Typ.** | V | 1.7 |
| **Forward Voltage — Max.** | V | 2.2 |
| **Continuous Forward Current, Max.** | mA | 100 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | 1.0 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 |
| **Peak Wave Length** | nm | 670 |
| **Dissipation Max. @ 25°C** | mW | 180 |
| **Derate Linearly from 25°C** | mW/°C | 2.0 |
| **Capacitance @ V = O** | P.F. | 30 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — |

# MODELS 4300H1LC, 4300H7LC

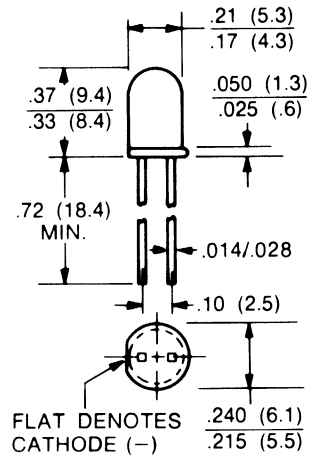
## FEATURES

T-1¾ **BRITE** LEDs

- Require only 2 mA!
- Ideal for limited-current power supplies



## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4300H1LC | 4300H7LC |
|---|---|---|---|
| **Output Color** | | Red | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused |
| **Package Color** | | Red | Yellow |
| **Viewing Angle** | DEG. | 50 | 50 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 1.2 | 1.2 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 2.0 | 1.8 |
| **Rated Current** | mA | 2 | 2 |
| **Forward Voltage — Typ.** | V | 1.8 | 1.9 |
| **Forward Voltage — Max.** | V | 2.2 | 2.7 |
| **Continuous Forward Current, Max.** | mA | 7 | 7 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .007 | .007 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 |
| **Peak Wave Length** | | 635 | 583 |
| **Dissipation Max. @ 25°C** | mW | 27 | 24 |
| **Derate Linearly from 25°C** | mW/°C | — | — |
| **Capacitance @ V = O** | P.F. | 4 | 4 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — |

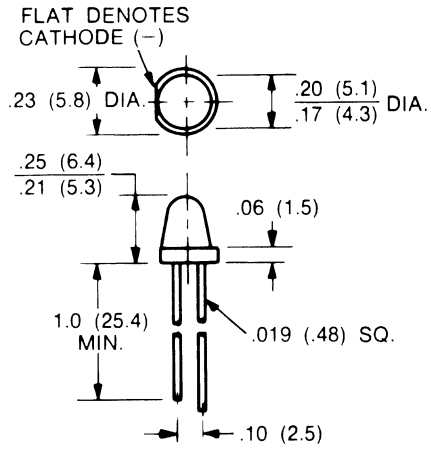
# MODEL 4300S1

## FEATURES

T-1¾ **BRITE** RED LED

- Good light output
- Wide viewing angle
- Economical

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4300S1 |
|---|---|---|
| **Output Color** | | Red |
| **Diffused — Non Diffused** | | Diffused |
| **Package Color** | | Red |
| **Viewing Angle** | DEG. | 80 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 0.6 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 1.5 |
| **Rated Current** | mA | 10 |
| **Forward Voltage — Typ.** | V | 2.0 |
| **Forward Voltage — Max.** | V | 2.8 |
| **Continuous Forward Current, Max.** | mA | 30 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | 1.0 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 |
| **Peak Wave Length** | nm | 697 |
| **Dissipation Max. @ 25°C** | mW | 100 |
| **Derate Linearly from 25°C** | mW/°C | 1.5 |
| **Capacitance @ V = O** | P.F. | 50 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — |

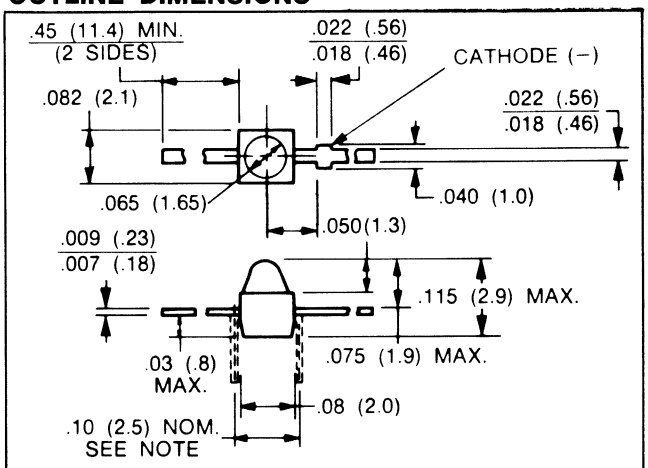
# MODELS 4300T1LC, 4300T7LC

## FEATURES

SUB-MINIATURE
**SUPER-BRITE** LEDs

- Requires only 2 mA!
- Ideal for limited-current power supplies

## OUTLINE DIMENSIONS




NOTE: USER MAY BEND LEADS AS SHOWN.
ALL DIMENSIONS ARE IN INCHES (MM).

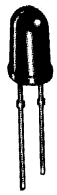
| | UNITS | 4300T1LC | 4300T7LC |
|---|---|---|---|
| **Output Color** | | Red | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused |
| **Package Color** | | Red | Yellow |
| **Viewing Angle** | DEG. | 70 | 70 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 0.4 | 0.4 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 0.8 | 0.8 |
| **Rated Current** | mA | 2 | 2 |
| **Forward Voltage — Typ.** | V | 1.8 | 1.9 |
| **Forward Voltage — Max.** | V | 2.2 | 2.7 |
| **Continuous Forward Current, Max.** | mA | 7 | 7 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .007 | .007 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 |
| **Peak Wave Length** | nm | 635 | 583 |
| **Dissipation Max. @ 25°C** | mW | 27 | 24 |
| **Derate Linearly from 25°C** | mW/°C | — | — |
| **Capacitance @ V = O** | P.F. | 4 | 4 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — |

# SERIES 4301H1/1, 4301H5/5

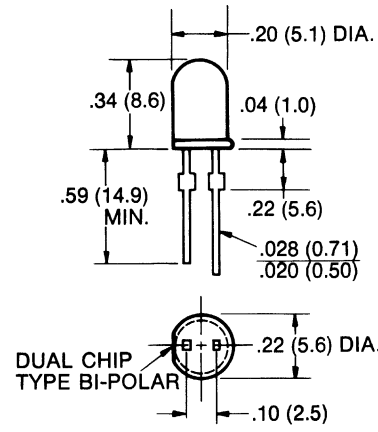
## FEATURES

T-1¾ **SUPER-BRITE**
BI-POLAR LEDs

- Ideal for use on AC or DC where polarity cannot be determined
- Ideal for field installaion



## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4301H1/1 | 4305H5/5 |
|---|---|---|---|
| **Output Color** | | Red | Green |
| **Diffused — Non Diffused** | | Diffused | Diffused |
| **Package Color** | | Red | Green |
| **Viewing Angle** | DEG. | 50 | 50 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 1.0 | 7 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 2.0 | 14 |
| **Rated Current** | mA | 20 | 20 |
| **Forward Voltage — Typ.** | V | 1.7 | 2.1 |
| **Forward Voltage — Max.** | V | 2.0 | 2.5 |
| **Continuous Forward Current, Max.** | mA | 50 | 50 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .3 | .1 |
| **Reverse Breakdown Voltage (Min.)** | V | — | — |
| **Peak Wave Length** | nm | 650 | 565 |
| **Dissipation Max. @ 25°C** | mW | 100 | 125 |
| **Derate Linearly from 25°C** | mW/°C | 1.34 | 1.34 |
| **Capacitance @ V = O** | P.F. | 40 | 40 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — |

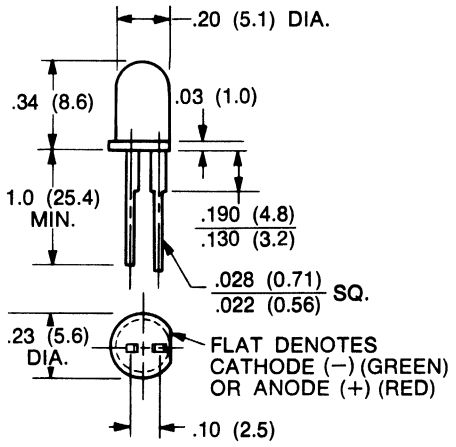
# MODEL 4301H1/5

## FEATURES

T-1¾ DUAL COLOR LED

- Provides red and green in the same two lead package
- Chips are brightness matched—green and red light output is uniform

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4301H1/5 | |
|---|---|---|---|
| **Output Color** | | Red/Green | |
| **Diffused — Non Diffused** | | Diffused | |
| **Package Color** | | Clear | |
| **Viewing Angle** | DEG. | — | |
| **Min. Lum. Intensity @ Rated Current** | mcd | Red-0.6 Green-0.6 | |
| **Typ. Lum. Intensity @ Rated Current** | mcd | Red-1.8 Green-1.8 | |
| **Rated Current** | mA | 10 | |
| **Forward Voltage — Typ.** | V | 2.2 | |
| **Forward Voltage — Max.** | V | 2.8 | |
| **Continuous Forward Current, Max.** | mA | 25 | |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .06 | |
| **Reverse Breakdown Voltage (Min.)** | V | — | |
| **Peak Wave Length** | nm | Red-697 | Green-565 |
| **Dissipation Max. @ 25°C** | mW | 115 | |
| **Derate Linearly from 25°C** | mW/°C | 1.5 | |
| **Capacitance @ V = O** | P.F. | 100 | |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — |

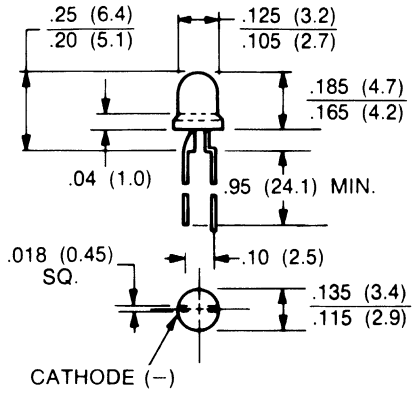
# MODEL 4302F1-5V

## FEATURES

T-1 **SUPER-BRITE** LED WITH INTEGRAL CURRENT-LIMITING RESISTOR

- TTL compatible — requires no external current limiter
- High intensity light output

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4302F1-5V |
|---|---|---|
| **Output Color** | | Red |
| **Diffused — Non Diffused** | | Diffused |
| **Package Color** | | Red |
| **Viewing Angle** | DEG. | 60 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 0.8 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 1.5 |
| **Rated Current** | mA | 13 |
| **Forward Voltage — Typ.** | V | 5 |
| **Forward Voltage — Max.** | V | 7.5 |
| **Continuous Forward Current, Max.** | mA | 20 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | — |
| **Reverse Breakdown Voltage (Min.)** | V | 3 |
| **Peak Wave Length** | nm | 655 |
| **Dissipation Max. @ 25°C** | mW | — |
| **Derate Linearly from 25°C** | mW/°C | — |
| **Capacitance @ V = O** | P.F. | — |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | 13 |
| **Forward Current @ $V_F$ = 5V Max.** | mA | 20 |

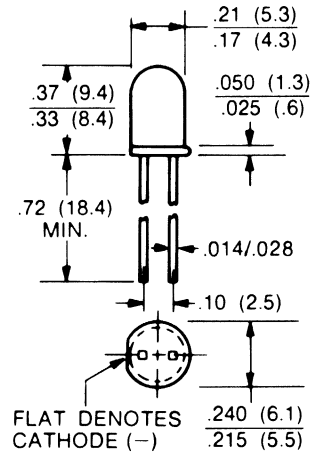
# SERIES 4302H-5V

## FEATURES

**T-1¾ SUPER-BRITE** LEDs WITH INTEGRAL CURRENT-LIMITING RESISTORS

- TTL compatible — requires no external current limiter
- Wide viewing angle

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4302H1-5V | 4302H3-5V | 4302H5-5V |
|---|---|---|---|---|
| **Output Color** | | Red | Amber | Green |
| **Diffused — Non Diffused** | | Diffused | Diffused | Diffused |
| **Package Color** | | Red | Amber | Green |
| **Viewing Angle** | DEG. | 90 | 90 | 90 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 1.5 | 1.5 | 1.5 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 4.0 | 4.0 | 4.0 |
| **Rated Current** | mA | 10 | 10 | 12 |
| **Forward Voltage — Typ.** | V | 5 | 5 | 5 |
| **Forward Voltage — Max.** | V | 7.5 | 7.5 | 7.5 |
| **Continuous Forward Current, Max.** | mA | 15 | 15 | 15 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | — | — | — |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 | 5 |
| **Peak Wave Length** | nm | 635 | 583 | 565 |
| **Dissipation Max. @ 25°C** | mW | — | — | — |
| **Derate Linearly from 25°C** | mW/°C | — | — | — |
| **Capacitance @ V = O** | P.F. | — | — | — |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | 10 | 10 | 12 |
| **Forward Current @ $V_F$ = 5V Max.** | mA | 15 | 15 | 15 |

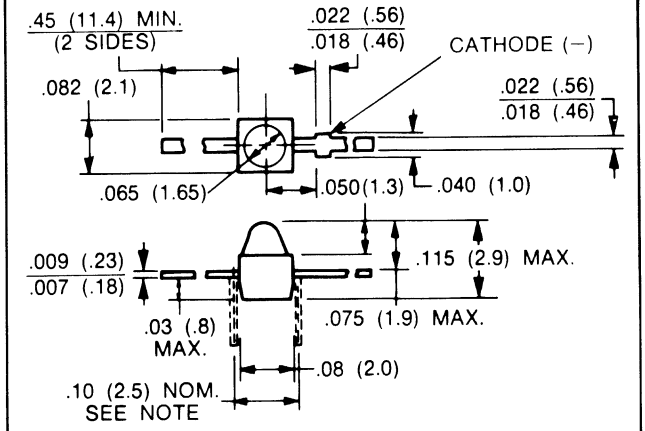
# MODEL 4302T1-5V

## FEATURES

SUB-MINIATURE **SUPER-BRITE** LED WITH INTEGRAL CURRENT-LIMITING RESISTOR

- TTL compatible— requires no external current limiter
- Wide viewing angle

## OUTLINE DIMENSIONS




NOTE: USER MAY BEND LEADS AS SHOWN.

ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4302T1-5V |
|---|---|---|
| **Output Color** | | Red |
| **Diffused — Non Diffused** | | Diffused |
| **Package Color** | | Red |
| **Viewing Angle** | DEG. | 80 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 1.0 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 2.4 |
| **Rated Current** | mA | 9.6 |
| **Forward Voltage — Typ.** | V | 5 |
| **Forward Voltage — Max.** | V | 6 |
| **Continuous Forward Current, Max.** | mA | 13 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | — |
| **Reverse Breakdown Voltage (Min.)** | V | 5 |
| **Peak Wave Length** | nm | 635 |
| **Dissipation Max. @ 25°C** | mW | — |
| **Derate Linearly from 25°C** | mW/°C | — |
| **Capacitance @ V = O** | P.F. | — |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | 9.6 |
| **Forward Current @ $V_F$ = 5V Max.** | mA | 13 |

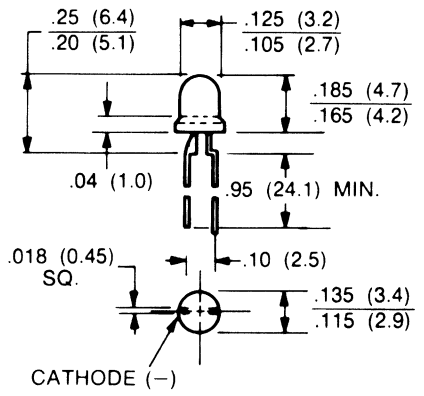
# SERIES 4303F

## FEATURES

**T-1 SUPER-BRITE** LEDs

- High intensity light output
- Wide viewing angle

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

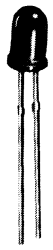
| | UNITS | 4303F1 | 4303F5 | 4303F7 |
|---|---|---|---|---|
| **Output Color** | | Red | Green | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused | Diffused |
| **Package Color** | | Red | Green | Yellow |
| **Viewing Angle** | DEG. | 90 | 90 | 90 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 1.5 | 2.0 | 1.5 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 2.5 | 5.0 | 3.0 |
| **Rated Current** | mA | 10 | 20 | 20 |
| **Forward Voltage — Typ.** | V | 2.0 | 2.2 | 2.1 |
| **Forward Voltage — Max.** | V | 3.0 | 3.0 | 3.0 |
| **Continuous Forward Current, Max.** | mA | 30 | 30 | 30 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | 1.0 | .09 | 1.0 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 | 5 |
| **Peak Wave Length** | nm | 635 | 562 | 585 |
| **Dissipation Max. @ 25°C** | mW | 120 | 120 | 120 |
| **Derate Linearly from 25°C** | mW/°C | — | — | — |
| **Capacitance @ V = O** | P.F. | 45 | 20 | 45 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — |

# SERIES 4304H

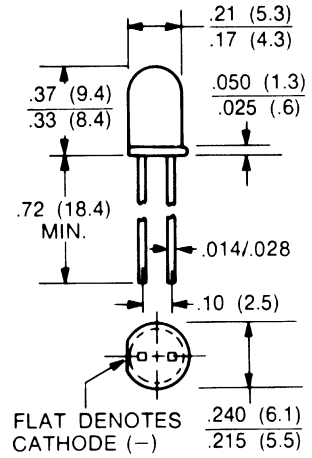
## FEATURES

**T-1¾ SUPER-BRITE** LEDs

- High-intensity light output
- Wide viewing angle



## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4304H1 | 4304H5 | 4304H7 |
|---|---|---|---|---|
| **Output Color** | | Red | Green | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused | Diffused |
| **Package Color** | | Red | Green | Yellow |
| **Viewing Angle** | DEG. | 65 | 75 | 65 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 3.0 | 3.0 | 2.5 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 10 | 12 | 11 |
| **Rated Current** | mA | 20 | 20 | 20 |
| **Forward Voltage — Typ.** | V | 2.0 | 2.2 | 2.1 |
| **Forward Voltage — Max.** | V | 3.0 | 3.0 | 3.0 |
| **Continuous Forward Current, Max.** | mA | 35 | 30 | 35 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | 1.0 | .09 | 1.0 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 | 5 |
| **Peak Wave Length** | nm | 635 | 562 | 585 |
| **Dissipation Max. @ 25°C** | mW | 120 | 120 | 120 |
| **Derate Linearly from 25°C** | mW/°C | 1.14 | — | 1.14 |
| **Capacitance @ V = O** | P.F. | 45 | 20 | 45 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — |

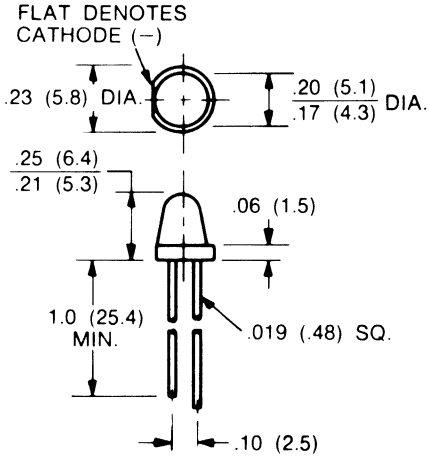
# SERIES 4304S

## FEATURES

**T-1¾ SUPER-BRITE** LEDs

- Low profile
- Wide viewing angle

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

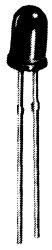
| | UNITS | 4304S1 | 4304S5 | 4304S7 |
|---|---|---|---|---|
| **Output Color** | | Red | Green | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused | Diffused |
| **Package Color** | | Red | Green | Yellow |
| **Viewing Angle** | DEG. | 50 | 50 | 50 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 2.0 | .5 | 1.5 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 4.0 | 3.0 | 3.0 |
| **Rated Current** | mA | 10 | 10 | 10 |
| **Forward Voltage — Typ.** | V | 2.0 | 2.2 | 2.1 |
| **Forward Voltage — Max.** | V | 3.0 | 3.0 | 3.0 |
| **Continuous Forward Current, Max.** | mA | 35 | 30 | 35 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | 1.0 | .09 | 1.0 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 | 5 |
| **Peak Wave Length** | nm | 630 | 562 | 585 |
| **Dissipation Max. @ 25°C** | mW | 105 | 180 | 105 |
| **Derate Linearly from 25°C** | mW/°C | 1.14 | — | 1.14 |
| **Capacitance @ V = O** | P.F. | 45 | 20 | 45 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — |

# SERIES 4305H

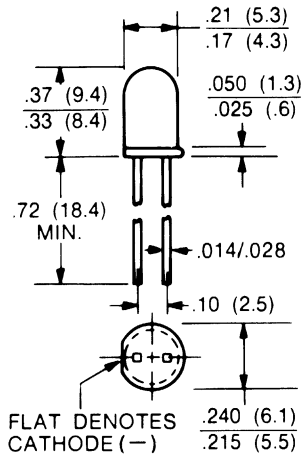
## FEATURES

**T-1¾ SUPER-BRITE** LEDs

- Narrow beam viewing angle
- High-intensity light output



## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4305H1 | 4305H5 | 4305H7 |
|---|---|---|---|---|
| **Output Color** | | Red | Green | Yellow |
| **Diffused — Non Diffused** | | Non-Diffused | Non-Diffused | Non-Diffused |
| **Package Color** | | Red | Green | Yellow |
| **Viewing Angle** | DEG. | 28 | 35 | 28 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 17 | 12 | 10 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 40 | 25 | 45 |
| **Rated Current** | mA | 20 | 20 | 20 |
| **Forward Voltage — Typ.** | V | 2.0 | 2.3 | 2.1 |
| **Forward Voltage — Max.** | V | 3.0 | 3.0 | 3.0 |
| **Continuous Forward Current, Max.** | mA | 35 | 30 | 35 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | 1.0 | .09 | 1.0 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 | 5 |
| **Peak Wave Length** | nm | 635 | 562 | 585 |
| **Dissipation Max. @ 25°C** | mW | 120 | 120 | 120 |
| **Derate Linearly from 25°C** | mW/°C | — | — | — |
| **Capacitance @ V = O** | P.F. | 45 | 20 | 45 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — |

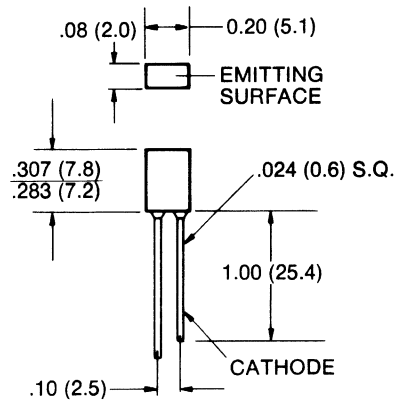
# SERIES 4306D

## FEATURES

RECTANGULAR
**SUPER-BRITE** LEDs

- High intensity light output spread uniformly over entire front surface
- Ideal for flush mounted panel indicators or for backlighting legends

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4306D1 | 4306D5 | 4306D7 |
|---|---|---|---|---|
| **Output Color** | | Red | Green | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused | Diffused |
| **Package Color** | | Red | Green | Yellow |
| **Viewing Angle** | DEG. | 100 | 100 | 100 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 0.3 | 1.5 | 1.2 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 0.5 | 3.0 | 2.4 |
| **Rated Current** | mA | 10 | 20 | 20 |
| **Forward Voltage — Typ.** | V | 2.1 | 2.1 | 2.2 |
| **Forward Voltage — Max.** | V | 2.5 | 2.5 | 2.5 |
| **Continuous Forward Current, Max.** | mA | 30 | 50 | 50 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .1 | .1 | .1 |
| **Reverse Breakdown Voltage (Min.)** | V | 4 | 4 | 4 |
| **Peak Wave Length** | nm | 700 | 565 | 580 |
| **Dissipation Max. @ 25°C** | mW | 75 | 125 | 125 |
| **Derate Linearly from 25°C** | mW/°C | 1.3 | 1.3 | 1.3 |
| **Capacitance @ V = O** | P.F. | 70 | 50 | 40 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — |

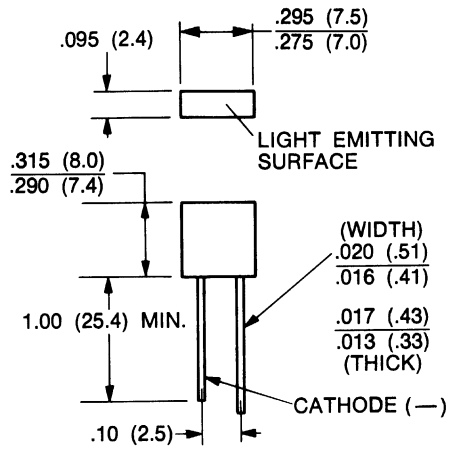
# SERIES 4306R

## FEATURES

RECTANGULAR
**SUPER-BRITE** LEDs

- High intensity light output spread uniformly over entire front surface
- Ideal for flush mounted panel indicators or for backlighting legends

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4306R1 | 4306R5 | 4306R7 |
|---|---|---|---|---|
| **Output Color** | | Red | Green | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused | Diffused |
| **Package Color** | | Red | Green | Yellow |
| **Viewing Angle** | DEG. | 100 | 100 | 100 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 2.5 | 1.5 | 3.0 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 5.0 | 2.5 | 5.0 |
| **Rated Current** | mA | 25 | 20 | 20 |
| **Forward Voltage — Typ.** | V | 2.1 | 2.3 | 2.2 |
| **Forward Voltage — Max.** | V | 3.0 | 3.0 | 3.0 |
| **Continuous Forward Current, Max.** | mA | 30 | 30 | 20 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .09 | .09 | .06 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 | 5 |
| **Peak Wave Length** | nm | 635 | 565 | 583 |
| **Dissipation Max. @ 25°C** | mW | 135 | 135 | 85 |
| **Derate Linearly from 25°C** | mW/°C | — | — | — |
| **Capacitance @ V = O** | P.F. | 17 | 18 | 17 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | 18 | — |

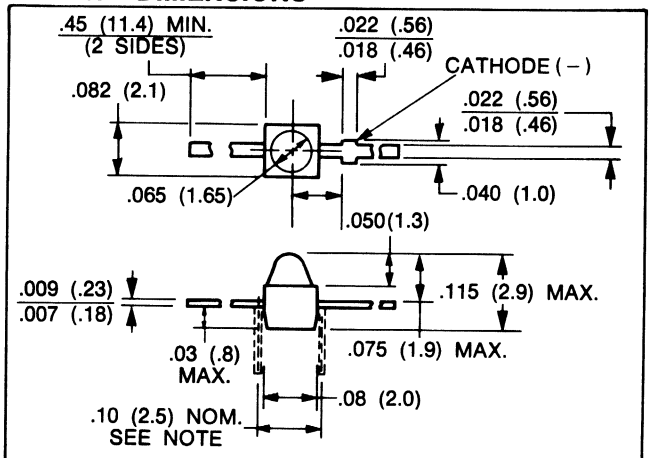
# SERIES 4307T

## FEATURES

SUB-MINIATURES
**SUPER-BRITE** LEDs

- High-Intensity light output
- Low profile package and radial leads
- Wide viewing angle

## OUTLINE DIMENSIONS




NOTE: USER MAY BEND LEADS AS SHOWN.
ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4307T1 | 4307T5 | 4307T7 |
|---|---|---|---|---|
| **Output Color** | | Red | Green | Yellow |
| **Diffused — Non Diffused** | | Diffused | Diffused | Diffused |
| **Package Color** | | Red | Green | Yellow |
| **Viewing Angle** | DEG. | 80 | 70 | 90 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 1.0 | 1.0 | 1.0 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 3.0 | 3.0 | 3.0 |
| **Rated Current** | mA | 10 | 10 | 10 |
| **Forward Voltage — Typ.** | V | 2.2 | 2.3 | 2.2 |
| **Forward Voltage — Max.** | V | 3.0 | 3.0 | 3.0 |
| **Continuous Forward Current, Max.** | mA | 30 | 30 | 20 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .06 | .06 | .06 |
| **Reverse Breakdown Voltage (Min.)** | V | 5 | 5 | 5 |
| **Peak Wave Length** | nm | 635 | 565 | 583 |
| **Dissipation Max. @ 25°C** | mW | 120 | 120 | 120 |
| **Derate Linearly from 25°C** | mW/°C | — | — | — |
| **Capacitance @ V = 0** | P.F. | 11 | 18 | 15 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — |

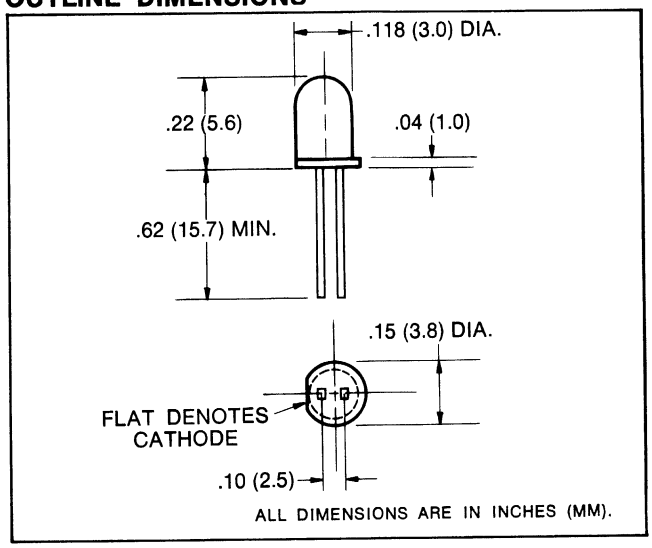
# SERIES 4308F

## FEATURES

T-1 **EXTRA SUPER-BRITE** LEDs

- High intensity light output
- Ideal for high ambient light conditions

## OUTLINE DIMENSIONS



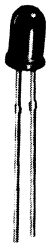

| | UNITS | 4308F1 | 4308F3 | 4308F5 | 4308F7 |
|---|---|---|---|---|---|
| **Output Color** | | Red | Amber | Green | Yellow |
| **Diffused — Non Diffused** | | Non-Diff. | Non-Diff. | Non-Diff. | Non-Diff. |
| **Package Color** | | Clear | Clear | Clear | Clear |
| **Viewing Angle** | DEG. | 20 | 30 | 30 | 30 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 30 | 16 | 10 | 24 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 60 | 24 | 15 | 48 |
| **Rated Current** | mA | 20 | 20 | 20 | 20 |
| **Forward Voltage — Typ.** | V | 1.7 | 2.2 | 2.1 | 2.2 |
| **Forward Voltage — Max.** | V | 2.0 | 2.5 | 2.5 | 2.5 |
| **Continuous Forward Current, Max.** | mA | 50 | 50 | 50 | 50 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .3 | .1 | .1 | .1 |
| **Reverse Breakdown Voltage (Min.)** | V | 4 | 4 | 4 | 4 |
| **Peak Wave Length** | nm | 660 | 605 | 555 | 580 |
| **Dissipation Max. @ 25°C** | mW | 100 | 125 | 125 | 125 |
| **Derate Linearly from 25°C** | mW/°C | 1.3 | 1.3 | 1.3 | 1.3 |
| **Capacitance @ V = O** | P.F. | 50 | 50 | 50 | 40 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — | — |

# SERIES 4308H

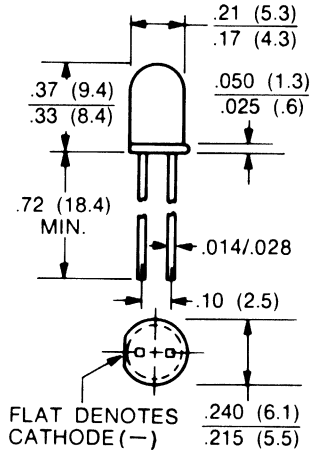
## FEATURES

**T-1¾ EXTRA SUPER-BRITE** LEDs

- High-intensity light output
- Ideal light conditions



## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

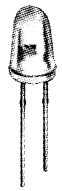
| | UNITS | 4308H1 | 4308H3 | 4308H5 | 4308H7 |
|---|---|---|---|---|---|
| **Output Color** | | Red | Amber | Green | Yellow |
| **Diffused — Non Diffused** | | Non-Diff. | Non-Diff. | Non-Diff. | Non-Diff. |
| **Package Color** | | Clear | Clear | Clear | Clear |
| **Viewing Angle** | DEG. | 20 | 20 | 20 | 20 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 80 | 60 | 50 | 80 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 160 | 90 | 80 | 160 |
| **Rated Current** | mA | 20 | 20 | 20 | 20 |
| **Forward Voltage — Typ.** | V | 1.7 | 2.2 | 2.1 | 2.1 |
| **Forward Voltage — Max.** | V | 2.0 | 2.5 | 2.5 | 2.5 |
| **Continuous Forward Current, Max.** | mA | 50 | 50 | 50 | 50 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .3 | .1 | .1 | .1 |
| **Reverse Breakdown Voltage (Min.)** | V | 4 | 4 | 4 | 4 |
| **Peak Wave Length** | nm | 660 | 580 | 555 | 570 |
| **Dissipation Max. @ 25°C** | mW | 100 | 125 | 125 | 125 |
| **Derate Linearly from 25°C** | mW/°C | — | — | — | — |
| **Capacitance @ V = O** | P.F. | 50 | 50 | 50 | 40 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — | — | — | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — | — | — | — |

# SERIES 4310H

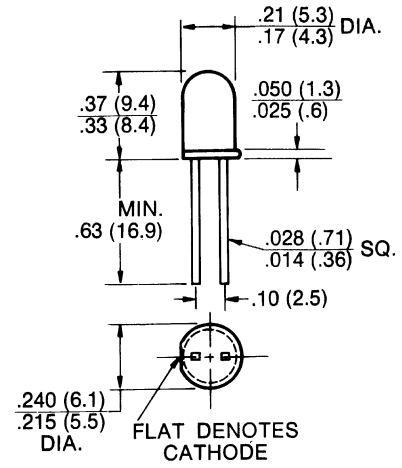
## FEATURES

**T-1¾ ULTRA SUPER-BRITE** LED

- HIGHEST intensity light output — **ONE FULL CANDELLA**
- Intense beam of light — 12° typical viewing angle



## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| | UNITS | 4310H1 |
|---|---|---|
| **Output Color** | | Red |
| **Diffused — Non Diffused** | | Non-Diffused |
| **Package Color** | | Clear |
| **Viewing Angle** | DEG. | 12 |
| **Min. Lum. Intensity @ Rated Current** | mcd | 700 |
| **Typ. Lum. Intensity @ Rated Current** | mcd | 1000 |
| **Rated Current** | mA | 20 |
| **Forward Voltage — Typ.** | V | 2.0 |
| **Forward Voltage — Max.** | V | 3.0 |
| **Continuous Forward Current, Max.** | mA | 50 |
| **Peak Forward Current @ 1 Ms — 300 PPS** | A | .3 |
| **Reverse Breakdown Voltage (Min.)** | V | 4 |
| **Peak Wave Length** | nm | 660 |
| **Dissipation Max. @ 25°C** | mW | 125 |
| **Derate Linearly from 25°C** | mW/°C | 1.3 |
| **Capacitance @ V = O** | P.F. | 50 |
| **Forward Current @ $V_F$ = 5V Typ.** | mA | — |
| **Forward Current @ $V_F$ = 5V Max.** | mA | — |

# IDI CAN SOLVE YOUR LED PACKAGING PROBLEMS, SAVE YOU TIME AND MONEY IN PRODUCTION.

LEDs present special problems for design engineers. The LED is one of the few circuit components that must also interface with the user of your equipment, yet, unlike switches, LEDs do not come with built-in mounting means or spacers. Use of cut sleeving or spacers is slow, awkward, and often non-uniform; machined insulating blocks can be very expensive and awkward to handle. Lining up board-mounted LEDs with panel opening can cause production nightmares. In addition, bare LEDs can provide a path for static discharge that will damage integrated circuits and other delicate components.

IDI LED assemblies can solve all of these problems. We have a variety of panel mounted and PC board mounted assemblies, designed to install quickly, provide proper spacing and insulation as well as uniform and secure mounting. Many IDI panel-mounted assemblies have plastic lenses for added static discharge protection plus attractive wide-angle viewing. IDI off-the-shelf models incorporate SUPER-BRITE high-efficiency LEDs.

This catalog details many different off-the-shelf models. Standard options include use of lower cost BRITE LEDs, leads tailored to your exact needs, and even reverse polarity if required by your circuit. Many models can be supplied with built-in resistors and/or rectifier diode protection.

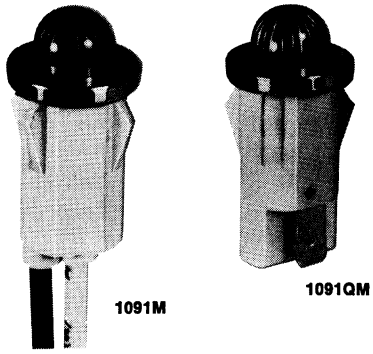
If the solution to your problem doesn't seem to lie in these pages, please call us anyway. We can often modify standard tooling to provide a solution to your problem at surprisingly modest costs — or one of the new products now in development may be the right answer. We look forward to working with you.

# PANEL MOUNTED LEDs

IDI panel mounted LED assemblies feature quick snap-fit panel mounting, wide angle visibility, and attractive appearance. While most assemblies incorporate ultra high intensity **SUPER-BRITE** LEDs, we also offer our Dual Color (Red/Green) LED in a panel mounted assembly (Model 5100H1/5). IDI LED assemblies are an economical way to enhance your front panel's appearance.

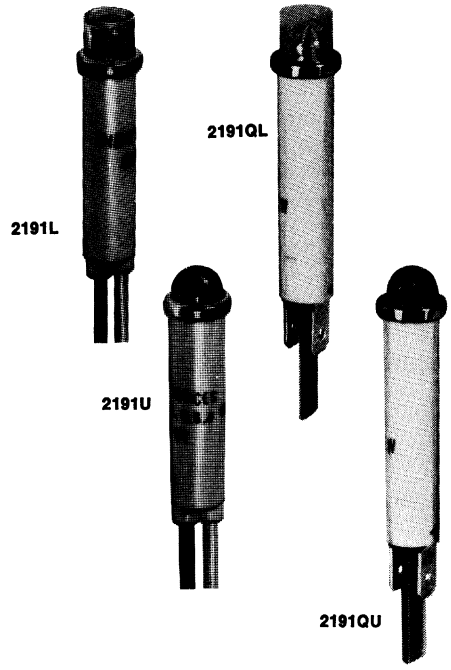
**FEATURES**
- Quick snap-fit panel mounting
- Attractive appearance
- **SUPER-BRITE** or Dual Color LEDs

## OMNI-GLOW 1091M, 1091QM




For Omni-Glow 1091M and 1091QM Series see page 133 in Non-Relampable section.

## GLO-DOT 219L, 2191QL, 2191U AND 2191QU




For Glo-Dot 2191L, 2191QL, 2191U and 2191QU Series see page 139 in Non-Relampable section.

# SERIES 3990A 7/32" DIA.

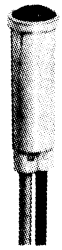
**FEATURES**

**Mounting:** Will snap-fit into .217/.221 (5.51/5.61) dia. hole in panels .031/.062 (.79/1.58) thick

**Wire Leads:** No. 24 AWG, 4.4/4.8 (112/122.9) long, stripped .43/.57 (10.9/14.5)

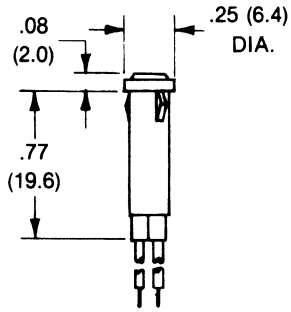
**Anode (+): Red lead**

**Housing:** White nylon



| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 3990A1 | Red | 4303F1 |
| 3990A5 | Green | 4303F5 |
| 3990A7 | Yellow | 4303F7 |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT LED ASSEMBLIES

## SERIES 5100H, 5102H ¼" DIA.

**FEATURES**

**Mounting:** Will snap-fit in .249/.254 (6.33/6.45) dia. hole in panels .031/.062 (.79/1.58) thick

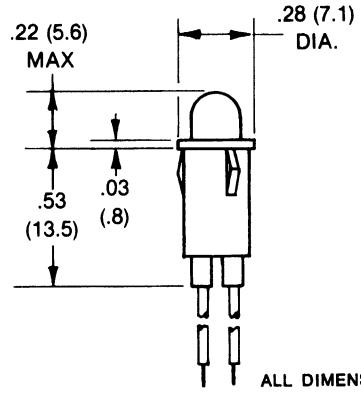
**Wire Leads:** No. 24 AWG, 4.4/4.8 (111.8/121.9) long

**Anode (+):** Red lead

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5100H1 | Red | 4304H1 |
| 5100H5 | Green | 4304H5 |
| 5100H7 | Yellow | 4304H7 |
| 5100H1LC | Red | 4300H1LC |
| 5100H7LC | Yellow | 4300H7LC |
| 5102H1-5V | Red | 4302H1-5V |
| 5102H3-5V | Amber | 4302H3-5V |
| 5102H5-5V | Green | 4302H5-5V |

**OUTLINE DIMENSIONS**




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT LED ASSEMBLIES

## SERIES 5100H1/5 ¼" DIA.

**FEATURES**

**Mounting:** Will snap-fit in .249/.254 (6.33/6.45) dia. hole in panels .031/.062 (.79/1.58) thick

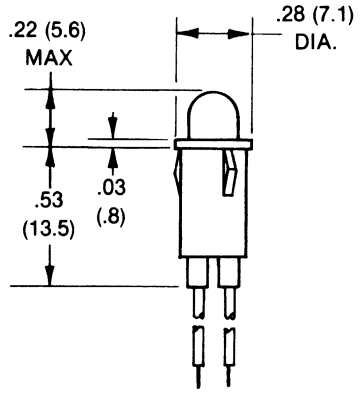
**Wire Leads:** No. 24 AWG, 4.4/4.8 (111.8/121.9) long

**Anode (+):** Yellow lead for red light — blue lead anode for green light

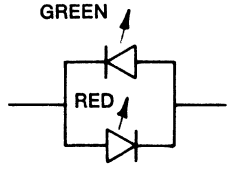
**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5100H1/5 | Red/Green | 4301H1/5 |

### OUTLINE DIMENSIONS




INTERNAL CIRCUITRY
(MODEL 5100H1/5)




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT LED ASSEMBLIES

## SERIES 5101H ¼" DIA.

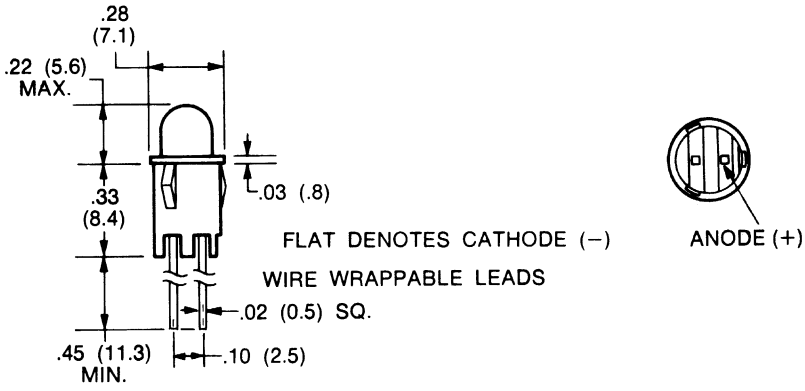
**FEATURES** **Mounting:** Will snap-fit in .249/.254 (6.33/6.45) dia. hole in panels .031/.062 (.79/1.58) thick

**Terminals:** .02 (0.5) Sq.

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5101H1 | Red | 4304H1 |
| 5101H5 | Green | 4304H5 |
| 5101H7 | Yellow | 4304H7 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT LED ASSEMBLIES

## SERIES 5110F 5/32" DIA.

**FEATURES** **Mounting:** Will snap-fit in .155/.158 (3.94/4.01) dia. hole in panels .031/.062 (.79/1.58) thick†

**Wire Leads:** No. 26 AWG, 4.4/4.8 (112/122) long, stripped .18/.32 (4.6/8.1)

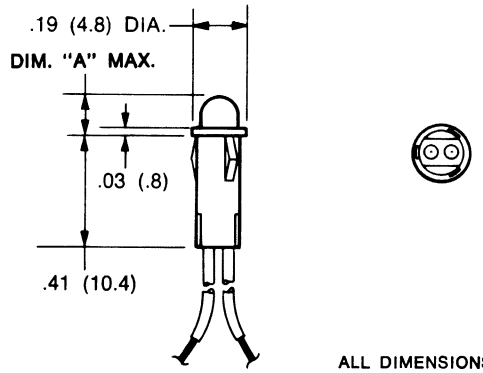
**Anode (+):** Red lead

**Housing:** Black nylon



| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" |
|---|---|---|---|
| 5110F1 | Red | 4303F1 | .19 (4.8) |
| 5110F5 | Green | 4303F5 | .19 (4.8) |
| 5110F7 | Yellow | 4303F7 | .19 (4.8) |
| 5110F1LC | Red | 4300F1LC | .15 (3.8) |
| 5110F7LC | Yellow | 4300F7LC | .15 (3.8) |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

† We recommend using an installation tool to press against flange of housing rather than LED.

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT
# LED ASSEMBLIES

## SERIES 5111F 5/32" DIA.

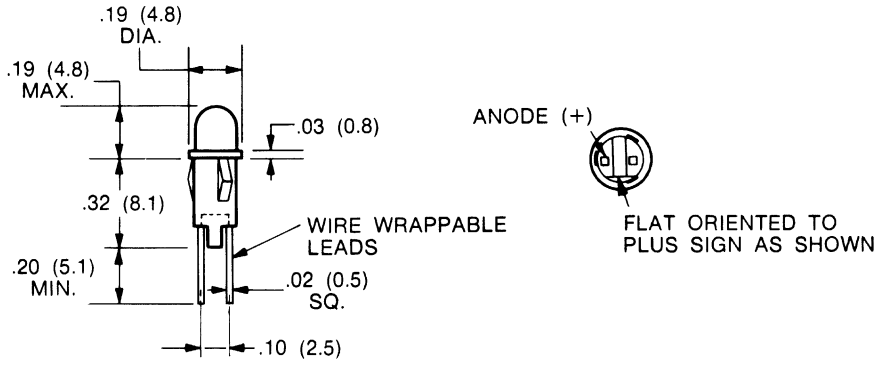
**FEATURES** **Mounting:** Will snap-fit in .155/.158 (3.94/4.01) dia. hole in panels .031/.062 (.79/1.58) thick†

**Terminals:** .02 (0.5) Sq.

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5111F1 | Red | 4303F1 |
| 5111F5 | Green | 4303F5 |
| 5111F7 | Yellow | 4303F7 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

† We recommend using an installation tool to press against flange of housing rather than LED.

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT LED ASSEMBLIES

## SERIES 5120F

**FEATURES**

**Mounting:** Rear twist into mounting hole specified.

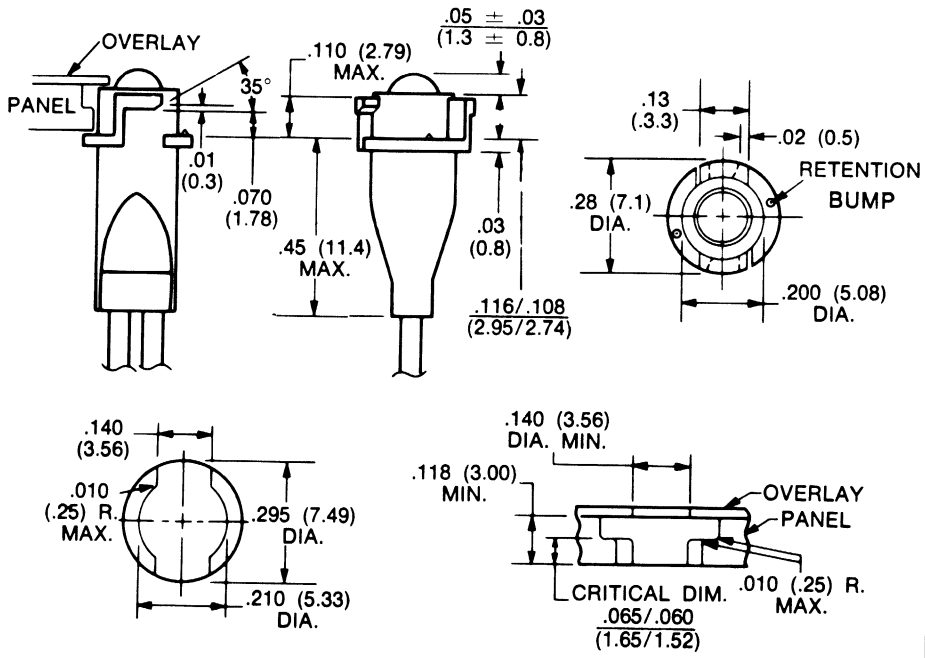
**Wire Leads:** Plastic leads (105°C). One red, one white, 4.4/4.8 (112/122) long. No. 26 AWG. Stripped .43/.57 (10.9/14.5)

**Housing:** Black nylon

**Anode (+):** Red lead

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5120F1 | Red | 4303F1 |
| 5120F5 | Green | 4303F5 |
| 5120F7 | Yellow | 4303F7 |

### OUTLINE DIMENSIONS



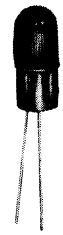

ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT LED ASSEMBLIES

## SERIES 5200F 3/16" DIA.

**FEATURES**
- Quick push-in panel mounting
- Attractive appearance
- Wide angle visibility
- High-intensity light output (GaAsP on GaP for red and yellow, GaP for green)



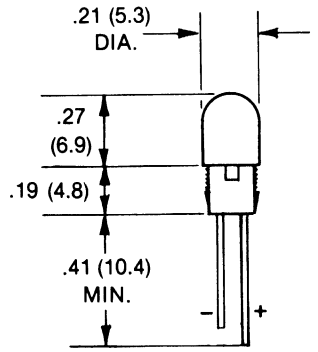
These assemblies offer the superior performance of **SUPER-BRITE** LEDs in a package that is economical to buy and install.

Mounting: Will snap-fit into .187/.192 (4.75/4.87) dia. hole in panels .020/.097 (.51/2.46) thick

**Lens:** Polycarbonate

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5200F1 | Red | 4303F1 |
| 5200F5 | Green | 4303F5 |
| 5200F7 | Yellow | 4303F7 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT LED ASSEMBLIES

## SERIES 5210F 3/16" DIA.

**FEATURES** This is an insulated lead version of the 5200F Series Sub-miniature **SUPER-BRITE** LED assembly that offers superior performance in a package that is economical to buy and install. This series gives protection against static discharge.

**Mounting:** Will snap-fit into .187/.192 (4.75/4.87) dia. hole in panel .020/.097 (.51/2.46) thick

**Wire Leads:** No. 26 AWG, 4.4/4.8 (111.8/121.9) long stripped: .18/.32 (4.6/8.1)

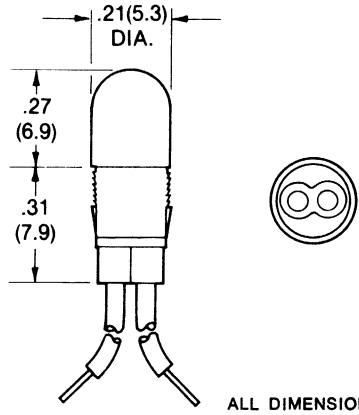
**Anode (+):** Red lead

**Lens:** Polycarbonate

**Housing:** Polycarbonate

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5210F1 | Red | 4303F1 |
| 5210F5 | Green | 4303F5 |
| 5210F7 | Yellow | 4303F7 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# SERIES 5400A 5/16" DIA.

**FEATURES** A unique design, the 5400 Series is a two-piece unit consisting of a lens and the housing-LED assembly. Simple, fast installation provided by placing the lens into mounting hole from the panel front and snapping the housing assembly onto the lens from the rear. Allows pre-wiring into the circuit and testing before installation. Has low-profile, damage-resistant lens offering static discharge protection and wide-angle viewing.

**Mounting:** Will snap-fit into .312/.317 (7.93/8.05) dia. hole in panel .020/.098 (0.51/2.49) thick

**Wide Leads:** No. 24 AWG, 4.4/4.8 (111.8/121.9) long, stripped: .43/.57 (10.9/14.5)

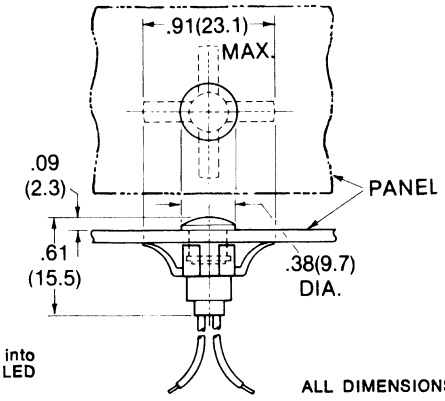
**Anode (+):** Red lead

**Lens:** Polycarbonate (page 165)

**Housing:** Natural nylon

| MODEL NO. | COLOR | INCORPORATES SUPER-BRITE LED | INCLUDES LENS MODEL NO. |
|---|---|---|---|
| 5400A1 | Red | 4305H1 | 4741 |
| 5400A5 | Green | 4305H5 | 4745 |
| 5400A7 | Yellow | 4305H7 | 4747 |

## OUTLINE DIMENSIONS




Note: To install, insert lens into panel and press firmly to snap LED assembly onto rear of lens.

ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PANEL MOUNT LED ASSEMBLIES

## SERIES 5500Y 9/32" DIA.

**FEATURES** Miniature **SUPER-BRITE** LED assemblies offer attractive appearance, wide-angle viewing, electrostatic discharge protection, wire-wrap terminals. Available in plain LED and 5V resistor-included versions.

**Mounting Hole:** .29 (7.4) min. dia. for front-of-panel mounting use push-on speednut SN2212 or tubular mounting clip SN1220 (see page 170). Order mounting hardware separately.

**Terminals:** .025 (.64) square tinned brass pins

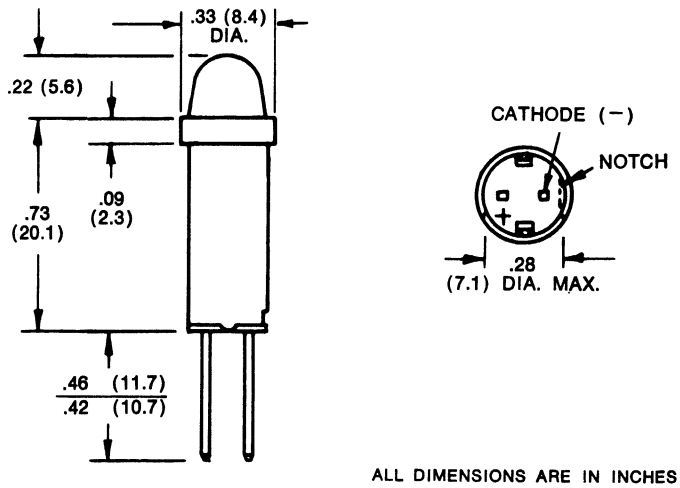
**Lens:** Polycarbonate

**Bezel:** Black oxide finished brass

**Housing:** White nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5500Y1 | Red | 4304H1 |
| 5500Y5 | Green | 4304H5 |
| 5500Y7 | Yellow | 4304H7 |
| 5502Y1-5V | Red | 4302H1-5V |
| 5502Y3-5V | Amber | 4302H3-5V |
| 5502Y5-5V | Green | 4302H5-5V |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

IDI printed circuit board mounted LED assemblies feature press-in mounting for accurate location on the board. These assemblies utilize **SUPER-BRITE** LEDs with state-of-the-art construction (GaAsP on GaP for red and yellow, GaP on GaP for green). They are easy to mount and have a high contrast ratio. The design of IDI board mounted LED assemblies includes a board standoff to prevent flux entrapment and permit easy washing.

## SERIES 5300E, 5300H, 5302H, 5308H

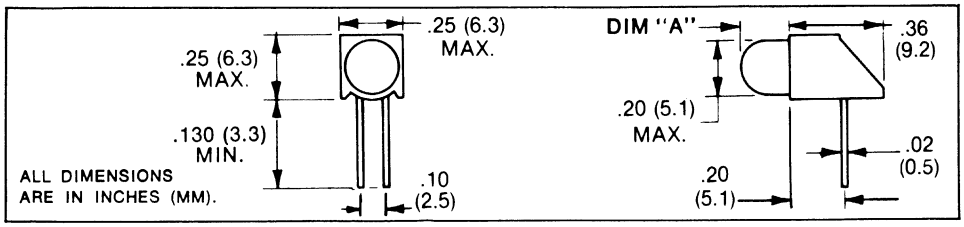
BOARD MOUNTED LED BLOCKS

**FEATURES** Easy to mount — High contrast ratio
High-intensity light output
Includes board standoff to prevent flux entrapment — permit easy washing
TTL compatible — requires no external current-limiting resistors (Series 5302H-5V only)

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" |
|---|---|---|---|
| 5300E1 | Red | 4300E1NF | .13 (3.3) |
| 5300E5 | Green | 4300E5NF | .13 (3.3) |
| 5300E7 | Yellow | 4300E7NF | .13 (3.3) |
| 5300H1 | Red | 4304H1 | .19 (4.8) |
| 5300H5 | Green | 4304H5 | .19 (4.8) |
| 5300H7 | Yellow | 4304H7 | .19 (4.8) |
| 5302H1-5V | Red | 4302H1-5V | .21 (5.3) |
| 5302H3-5V | Amber | 4303H3-5V | .21 (5.3) |
| 5302H5-5V | Green | 4302H5-5V | .21 (5.3) |
| 5300H1-LC | Red | 4300H1LC | .21 (5.3) |
| 5300H7-LC | Yellow | 4300H7LC | .21 (5.3) |
| 5308H1 | Red | 4308H1 | .19 (4.8) |
| 5308H3 | Amber | 4308H3 | .19 (4.8) |
| 5308H5 | Green | 4308H5 | .19 (4.8) |
| 5308H7 | Yellow | 4308H7 | .19 (4.8) |

### OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

Industrial Devices, Inc., Edgewater, NJ 07020 • (201) 224-4700 Telex: 127459 Fax: 201 224 9095

# PC BOARD MOUNTED LEDs



IDI printed circuit board mounted LED assemblies feature press-in mounting for accurate location on the board. These assemblies utilize **SUPER-BRITE** LEDs with state-of-the-art construction (GaAsP on GaP for red and yellow, GaP on GaP for green). They are easy to mount and have a high contrast ratio. The design of IDI board mounted LED assemblies includes a board standoff to prevent flux entrapment and permit easy washing.

**FEATURES** • Attractive • Easy to Mount
• Economical • **SUPER-BRITE** LEDs

## SERIES 5300H1/5

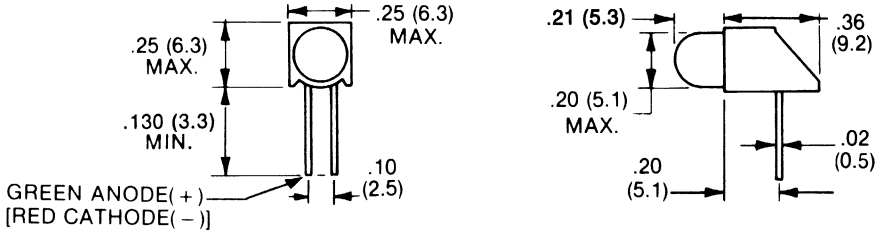
BOARD MOUNTED LED BLOCKS

**FEATURES** Easy to mount — High contrast ratio
High-intensity light output
Includes board standoff to prevent flux entrapment — permit easy washing
TTL compatible — requires no external current-limiting resistors

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5300H1/5 | Red/Green | 4301H1/5 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

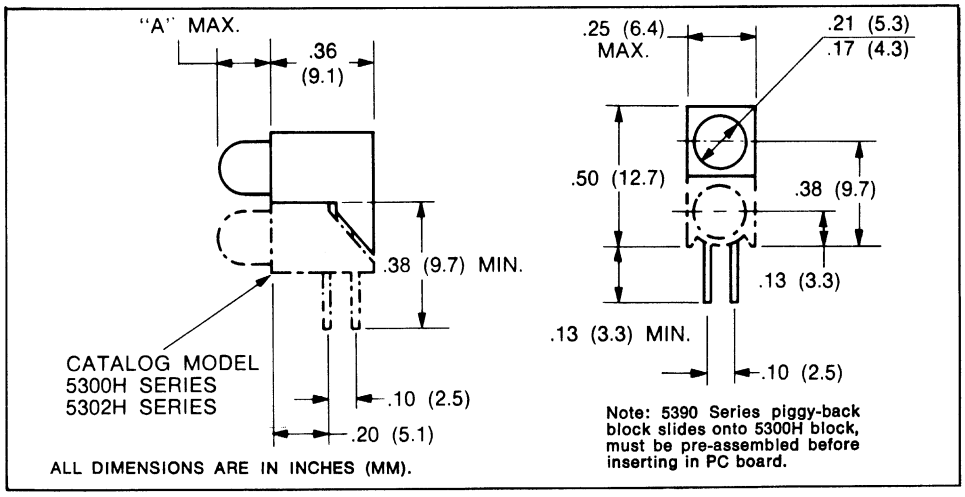
# SERIES 5390E, 5390H, 5392H

**FEATURES** For use in connection with 5300E and H series; 5307H, 5308H, 5640E & H series board mounted LED blocks.
Easy installation — slide onto 5300 series blocks, must be pre-assembled before mounting on PC board
Allow 2 LEDs in the same board area required for a single LED
High contrast ratio, high-intensity light output

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" |
|---|---|---|---|
| 5390E1 | Yellow | 4300E1NF | .13 (3.3) |
| 5390E5 | Red | 4300E5NF | .13 (3.3) |
| 5390E7 | Green | 4300E7NF | .13 (3.3) |
| 4390H1 | Red | 4304H1 | .19 (4.8) |
| 5390H5 | Green | 4304H5 | .19 (4.8) |
| 5390H7 | Yellow | 4304H7 | .19 (4.8) |
| 5392H1-5V | Red 5V | 4302H1-5V | .21 (5.3) |
| 5392H3-5V | Amber 5V | 4302H3-5V | .21 (5.3) |
| 5392H5-5V | Green 5V | 4302H5-5V | .21 (5.3) |
| 5390H1LC | Red | 4300H1LC | .21 (5.3) |
| 5390H7LC | Yellow | 4300H7LC | .21 (5.3) |

## OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

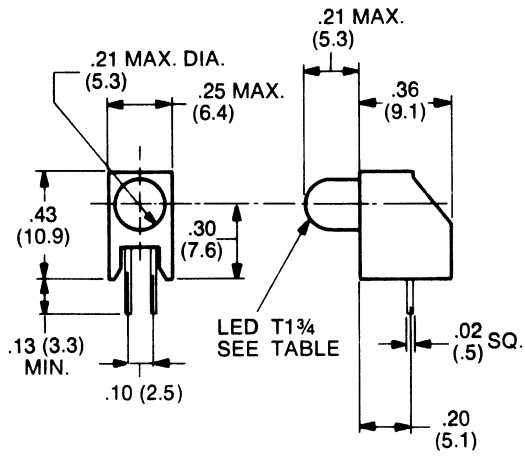
# SERIES 5306H

**FEATURES**
- Easy to mount
- High intensity light output
- Includes board standoff to prevent flux entrapment — permit easy washing

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5306H1 | Red | 4304H1 |
| 5306H5 | Green | 4304H5 |
| 5306H7 | Yellow | 4304H7 |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

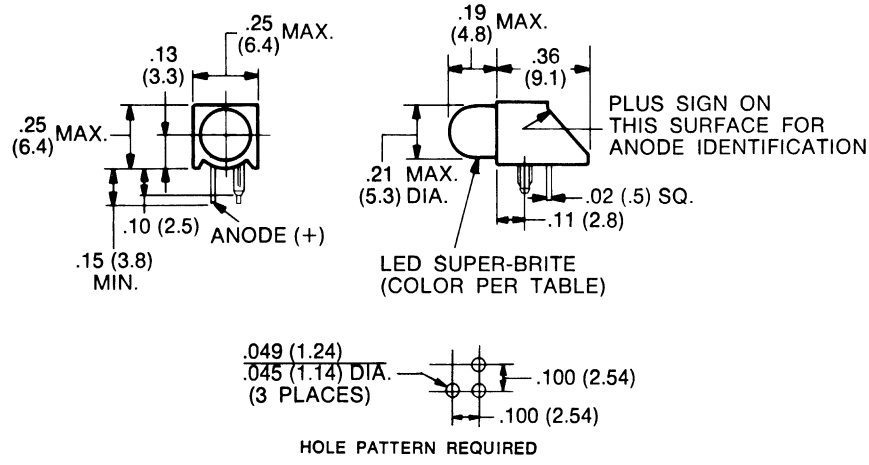
## SERIES 5307H

**FEATURES**
- Press-in mounting for accurate location on printed circuit board
- High intensity light output
- Includes board standoff to prevent flux entrapment — permit easy washing

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5307H1 | Red | 4304H1 |
| 5307H5 | Green | 4304H5 |
| 5307H7 | Yellow | 4304H7 |

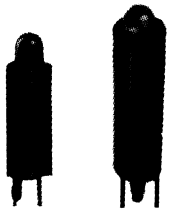
### OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5310F, 5312F

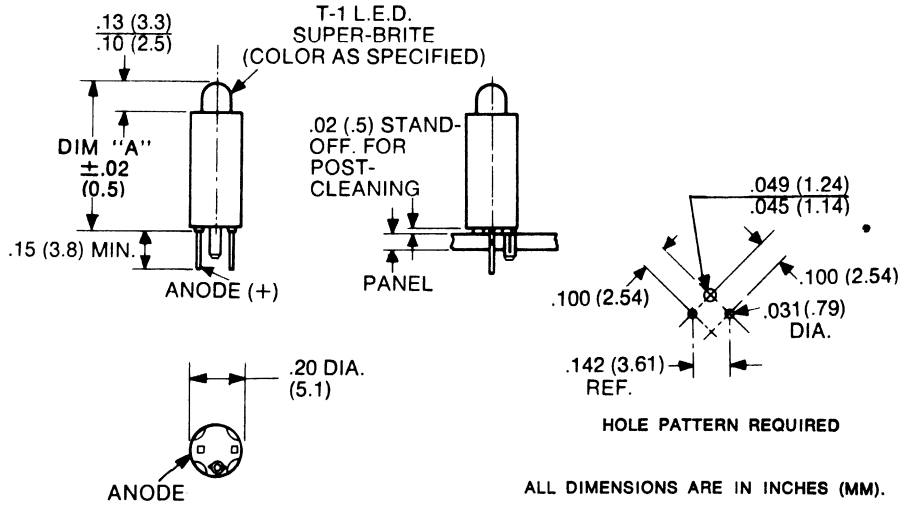


**FEATURES**
- Press-in mounting for accurate location on printed circuit board
- High-intensity light output
- Ideal for use where LEDs must align with opening in a cover or panel

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" |
|---|---|---|---|
| 5310F1 | Red | 4303F1 | .58 (14.7) |
| 5310F5 | Green | 4303F5 | .58 (14.7) |
| 5310F7 | Yellow | 4303F7 | .58 (14.7) |
| 5312F1 | Red | 4303F1 | .81 (20.6) |
| 5312F5 | Green | 4303F5 | .81 (20.6) |
| 5312F7 | Yellow | 4303F7 | .81 (20.6) |

### OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

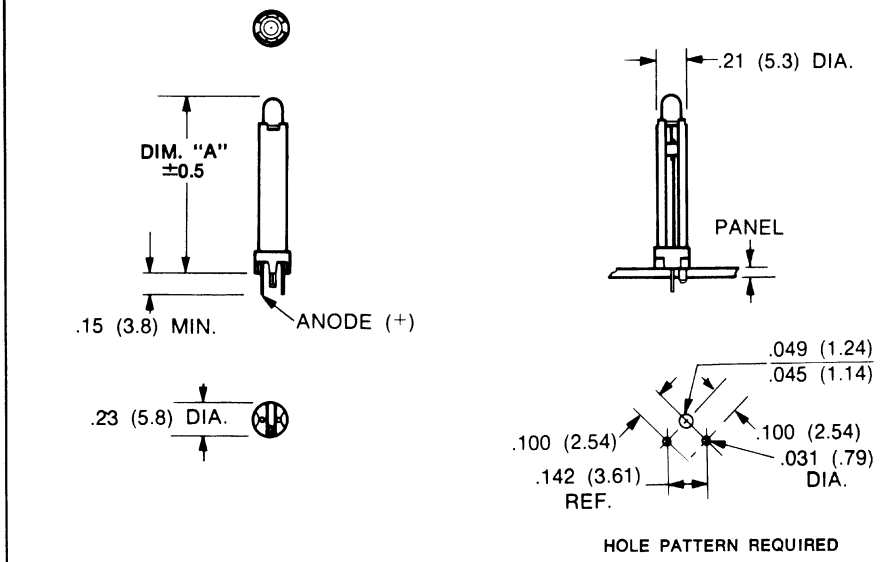
## SERIES 5311F, 5313F

**FEATURES**
- Press-in mounting for accurate location on printed circuit board
- High-intensity light output
- Ideal for use where LEDs must align with opening in a cover panel.

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" |
|---|---|---|---|
| 5311F1 | Red | 4303F1 | 1.25 (31.7) |
| 5311F5 | Green | 4303F5 | 1.25 (31.7) |
| 5311F7 | Yellow | 4303F7 | 1.25 (31.7) |
| 5313F1 | Red | 4303F1 | 1.35 (34.3) |
| 5313F5 | Green | 4303F5 | 1.35 (34.3) |
| 5313F7 | Yellow | 4303F7 | 1.35 (34.3) |

## OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5320F, 5321F, 5322F


5320F


5321F

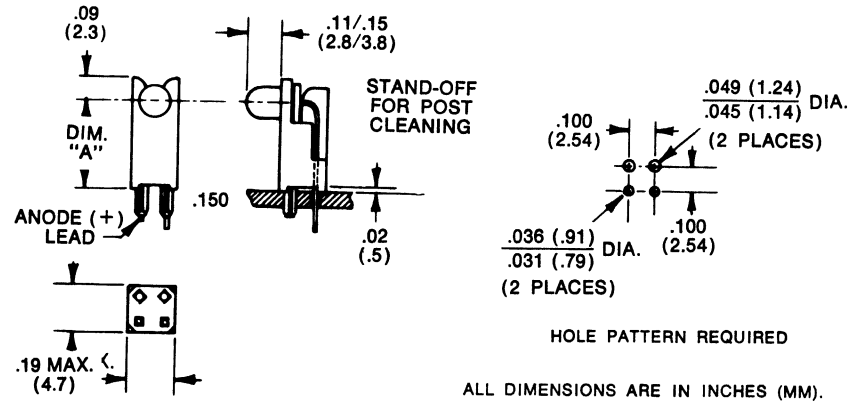

5322F

**FEATURES**
- 3 different board heights available
- Easy press-in mounting for precise positioning on printed circuit board
- T-1 size high intensity LEDs
- Ideal for use when the LED must line up with a panel opening or to provide uniform height for a row of LEDs.

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" |
|---|---|---|---|
| 5320F1 | Red | 4303F1 | .35 (8.9) |
| 5320F5 | Green | 4303F5 | .35 (8.9) |
| 5320F7 | Yellow | 4303F7 | .35 (8.9) |
| 5321F1 | Red | 4303F1 | .45 (11.4) |
| 5321F5 | Green | 4303F5 | .45 (11.4) |
| 5321F7 | Yellow | 4303F7 | .45 (11.4) |
| 5322F1 | Red | 4303F1 | .25 (6.4) |
| 5322F5 | Green | 4303F5 | .25 (6.4) |
| 5322F7 | Yellow | 4303F7 | .25 (6.4) |

## OUTLINE DIMENSIONS

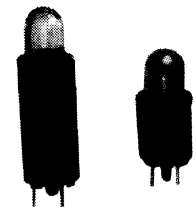



Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5330H, 5335H

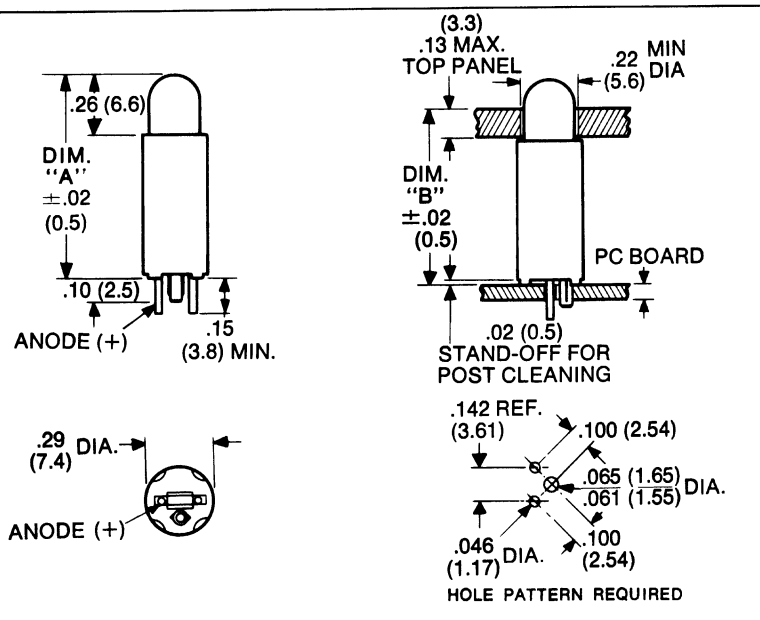
**FEATURES**
- T-1¾ size wide viewing angle LEDs
- Easy press-in mounting for precise positioning on printed circuit board
- Includes board stand-off to prevent flux entrapment — permit easy washing
- Height matches popular rocker and toggle switches



**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" | DIM. "B" |
|---|---|---|---|---|
| 5330H1 | Red | 4304H1 | .87 (22.1) | .75 (19.0) |
| 5330H5 | Green | 4304H5 | .87 (22.1) | .75 (19.0) |
| 5330H7 | Yellow | 4304H7 | .87 (22.1) | .75 (19.0) |
| 5335H1 | Red | 4304H1 | .57 (14.5) | .45 (11.4) |
| 5335H5 | Green | 4304H5 | .57 (14.5) | .45 (11.4) |
| 5337H7 | Yellow | 4304H7 | .57 (14.5) | .45 (11.4) |

### OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

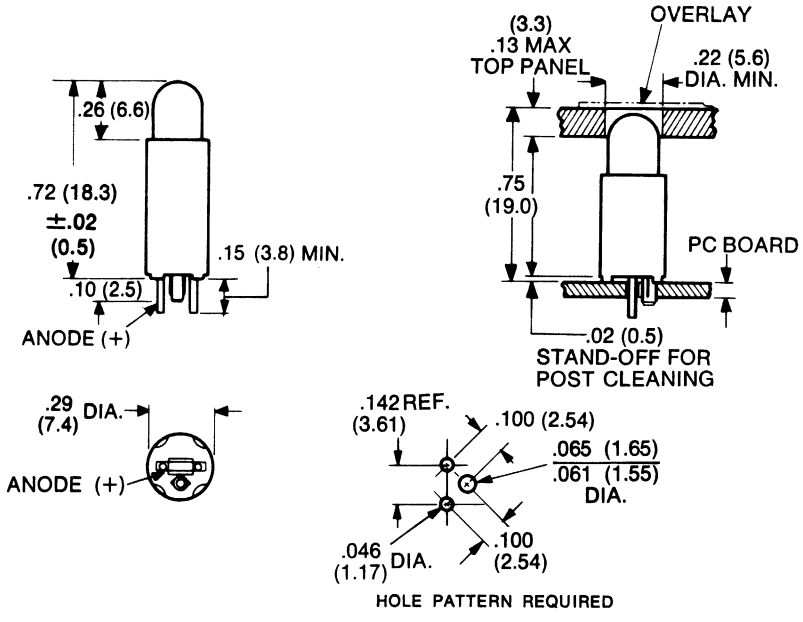
## SERIES 5331H

**FEATURES**
- T-1¾ size narrow beam LEDs
- Easy press-in mounting for precise positioning on printed circuit board
- Includes board stand-off to prevent flux entrapment — permit easy washing
- Height matches popular rocker and toggle switches — use SERIES 5331H to line up behind panel overlays

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5331H1 | Red | 4305H1 |
| 5331H5 | Green | 4305H5 |
| 5331H7 | Yellow | 4305H7 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5332H

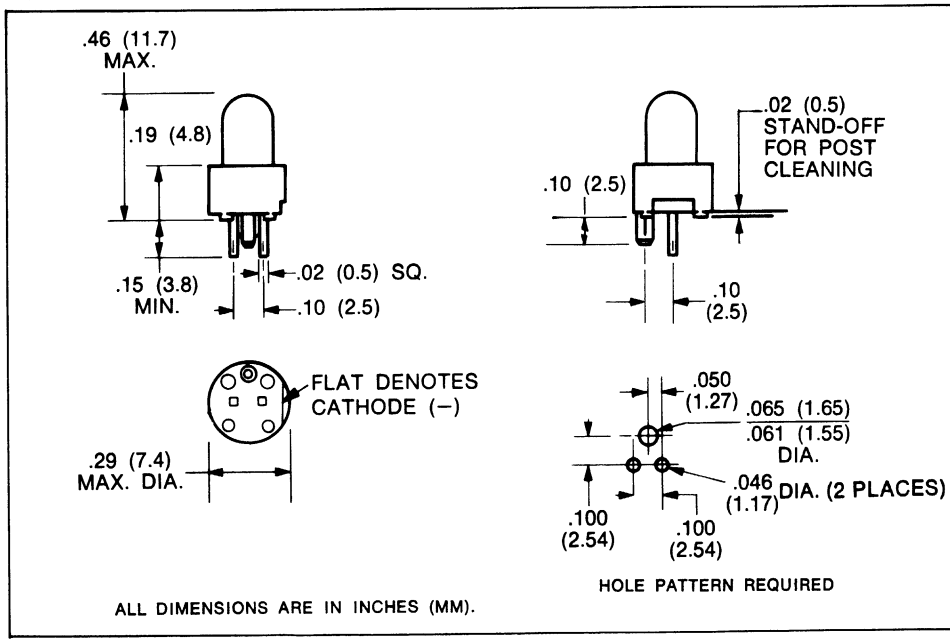
**FEATURES**

- T-1¾ size narrow beam LEDs
- Easy press-in mounting for precise positioning on printed circuit board
- Includes board stand-off to prevent flux entrapment — permit easy washing
- Low height makes this unit ideal for use on a board behind panel overlays where a precisely located illuminated spot is required.

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5332H1 | Red | 4305H1 |
| 5332H5 | Green | 4305H5 |
| 5332H7 | Yellow | 4305H7 |

### OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

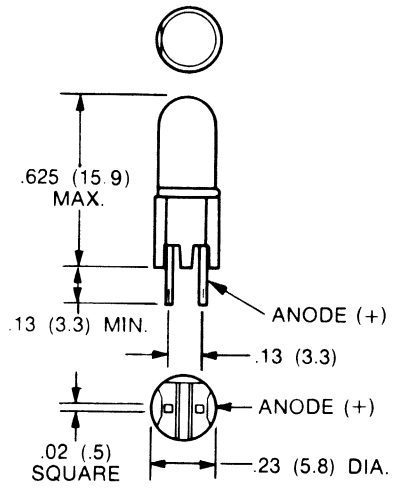
## SERIES 5340H

**FEATURES**
- T-1¾ size wide viewing angle LEDs
- Includes board stand-off, features .13 centers

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5340H1 | Red | 4304H1 |
| 5340H5 | Green | 4304H5 |
| 5340H7 | Yellow | 4304H7 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

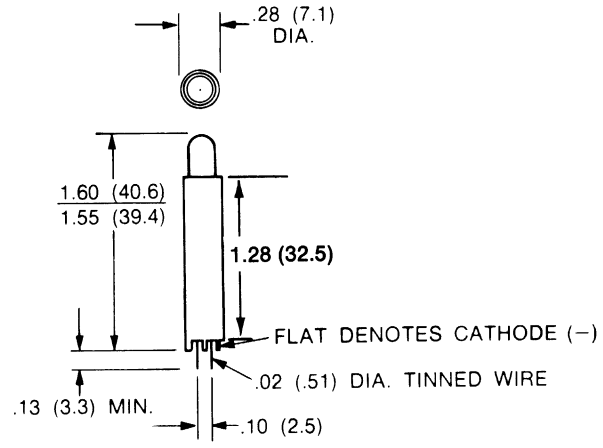
## SERIES 5341H

**FEATURES**
- T-1¾ size narrow beam LEDs
- LED is fully insulated, fully supported high above the board

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5341H1 | Red | 4305H1 |
| 5341H5 | Green | 4305H5 |
| 5341H7 | Yellow | 4305H7 |

### OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5350T

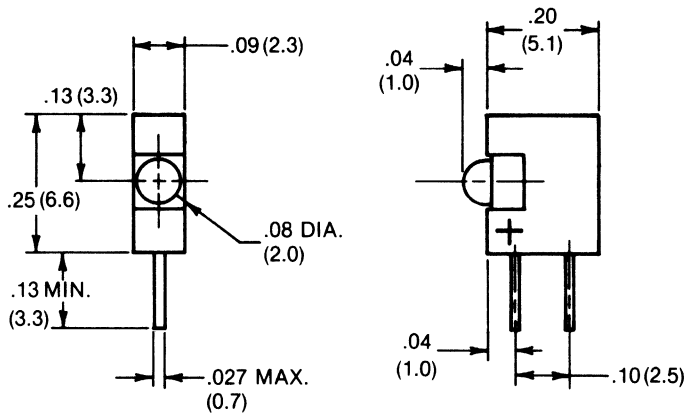
**FEATURES**
- Small size enables these to be stacked on 0.100″ center
- High-intensity light output
- Ideal for use where LEDs must align with opening in a cover panel.

**Housing:** Black nylon

5350T

| MODEL NO. | LENS COLOR | INCORPORATES LED |
|---|---|---|
| 5350T1 | Red | 4307T1 |
| 5350T5 | Green | 4307T5 |
| 5350T7 | Yellow | 4307T7 |
| 5352T1-5V | Red | 4302T1-5V |
| 5350T1LC | Red | 4300T1LC |
| 5350T7LC | Yellow | 4300T7LC |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5370T

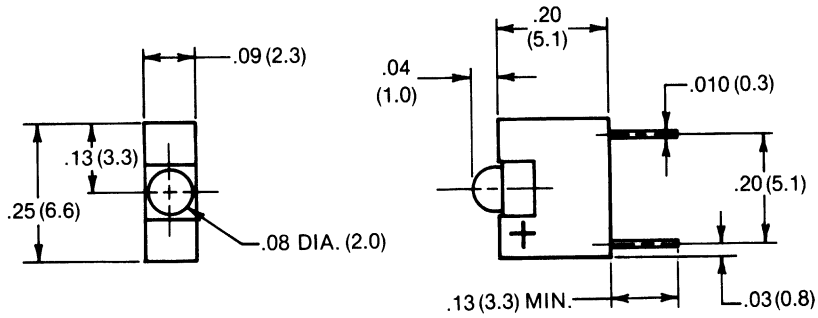
**FEATURES**
- Small size enables these to be stacked on 0.100″ center
- High-intensity light output
- Ideal for use where LEDs must align with opening in a cover panel.

**Housing:** Black nylon

5370T

| MODEL NO. | LENS COLOR | INCORPORATES LED |
|---|---|---|
| 5370T1 | Red | 4307T1 |
| 5370T5 | Green | 4307T5 |
| 5370T7 | Yellow | 4307T7 |
| 5372T1-5V | Red | 4302T1-5V |
| 5370T1LC | Red | 4300T1LC |
| 5370T7LC | Yellow | 4300T7LC |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

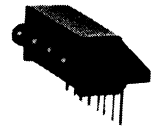
Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5360F

**FEATURES**
- Quad assembly permits economical purchase, easy mounting of 4 LEDs
- Includes board stand-off to prevent flux entrapment — permit easy washing

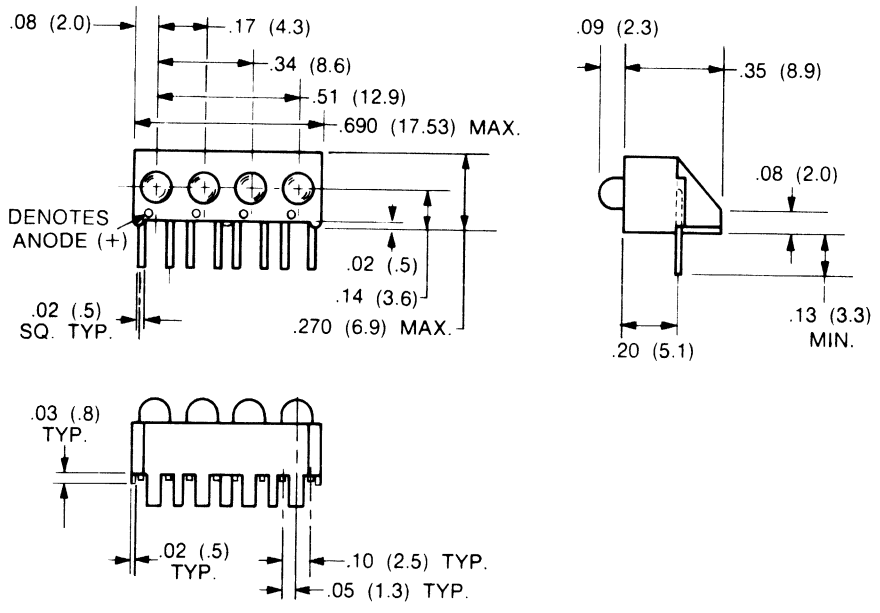
**Housing:** Black nylon





| MODEL NO. | COLOR | INCORPORATES 4 LEDs |
|---|---|---|
| 5360F1 | Red | 4300F1 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

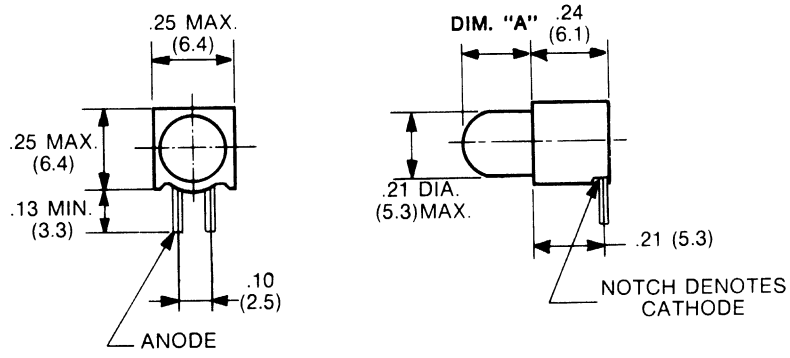
## SERIES 5380E, 5380H

**FEATURES**
- Easy to mount
- Includes board stand-off to prevent flux entrapment — permit easy washing
- Takes minimum board space

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" |
|---|---|---|---|
| 5380E1 | Red | 4300E1NF | .13 (3.3) |
| 5380E5 | Green | 4300E5NF | .13 (3.3) |
| 5380E7 | Yellow | 4300E7NF | .13 (3.3) |
| 5380H1 | Red | 4304H1 | .19 (4.8) |
| 5380H5 | Green | 4304H5 | .19 (4.8) |
| 5380H7 | Yellow | 4304H7 | .19 (4.8) |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

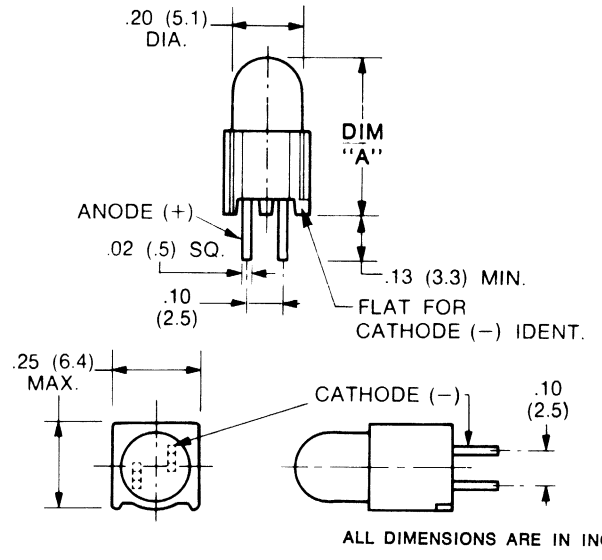
## SERIES 5381E, 5381H

**FEATURES**
- Easy to mount
- Includes board stand-off to prevent flux entrapment — permit easy washing
- Takes minimum board space

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" |
|---|---|---|---|
| 5381E1 | Red | 4300E1NF | .38 (9.7) |
| 5381E5 | Green | 4300E5NF | .38 (9.7) |
| 5381E7 | Yellow | 4300E7NF | .38 (9.7) |
| 5381H1 | Red | 4304H1 | .45 (11.4) |
| 5381H5 | Green | 4304H5 | .45 (11.4) |
| 5381H7 | Yellow | 4304H7 | .45 (11.4) |

### OUTLINE DIMENSIONS



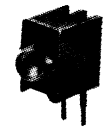

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5600F

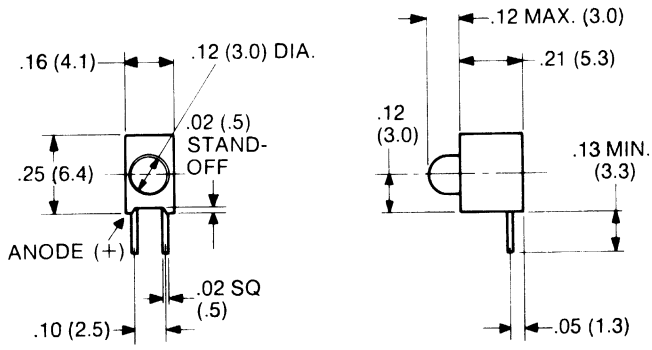
**FEATURES**
- Easy to mount
- Includes board stand-off to prevent flux entrapment — permit easy washing
- T-1 size high-intensity LEDs (GaAsP on GaP for red and yellow, GaP on GaP for green)

**Housing:** Black nylon



| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5600F1 | Red | 4303F1 |
| 5600F5 | Green | 4303F5 |
| 5600F7 | Yellow | 4303F7 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

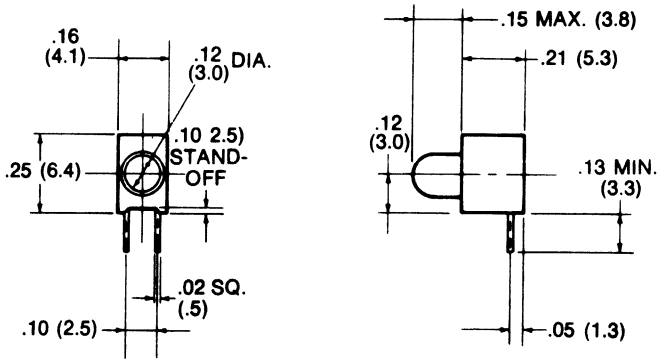
## SERIES 5608F

**FEATURES**
- High intensity light output
- Easy to mount, positions LED
- Includes board standoff to prevent flux entrapment — permit easy washing

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5608F1 | Red | 4308F1 |
| 5608F3 | Amber | 4308F3 |
| 5608F5 | Green | 4308F5 |
| 5608F7 | Yellow | 4308F7 |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

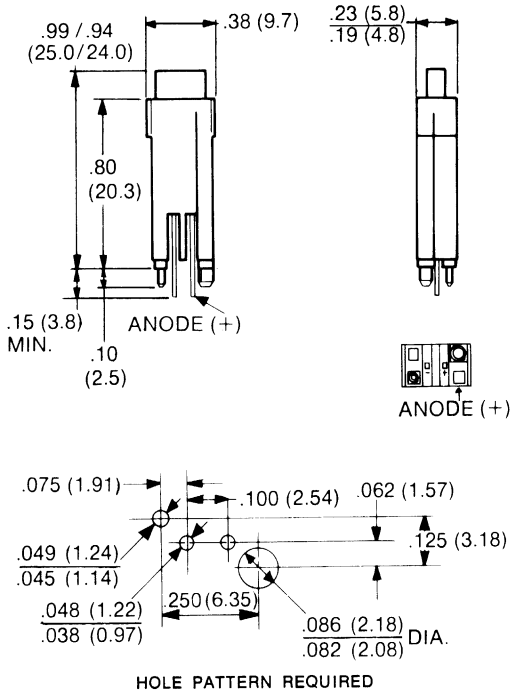
# PC BOARD MOUNTED LEDs

## SERIES 5610R

**FEATURES**
- Press-in mounting for accurate location on printed circuit board
- High-intensity light output spread uniformly over entire front surface

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5610R1 | Red | 4306R1 |
| 5610R5 | Green | 4306R5 |
| 5610R7 | Yellow | 4306R7 |

### OUTLINE DIMENSIONS



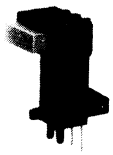

HOLE PATTERN REQUIRED

ALL DIMENSIONS ARE IN INCHES (MM).

# PC BOARD MOUNTED LEDs

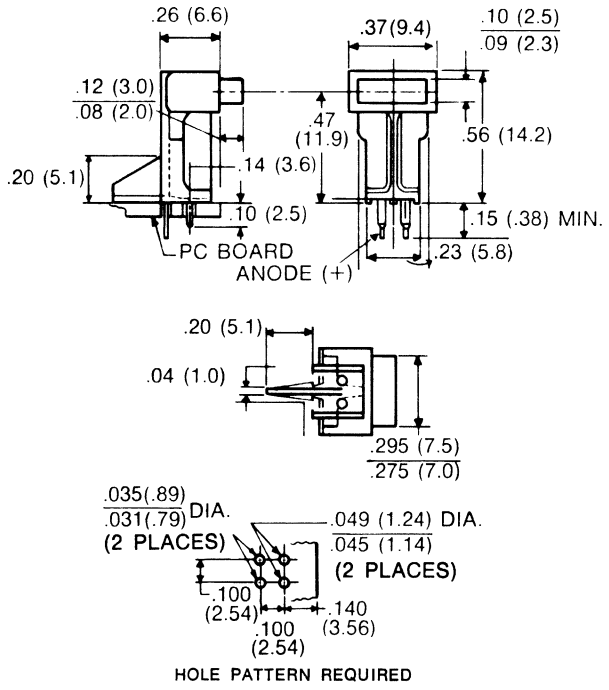
## SERIES 5620R

**FEATURES**
- Press-in mounting for accurate location on printed circuit board
- High-intensity light output spread uniformly over entire front surface



| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5620R1 | Red | 4306R1 |
| 5620R5 | Green | 4306R5 |
| 5620R7 | Yellow | 4306R7 |

### OUTLINE DIMENSIONS




HOLE PATTERN REQUIRED

ALL DIMENSIONS ARE IN INCHES (MM).

# PC BOARD MOUNTED LEDs

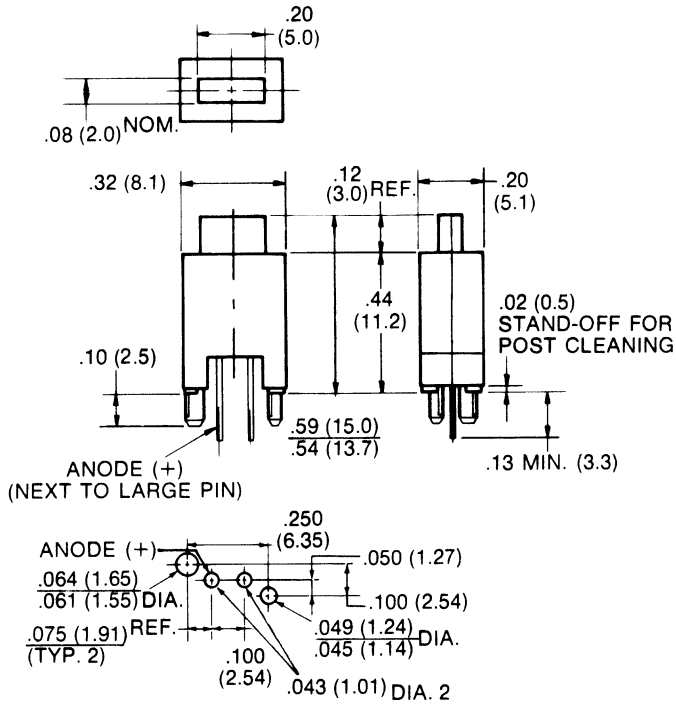
## SERIES 5630D

**FEATURES**
- Press-in mounting for accurate location on printed circuit board
- High intensity light output spread uniformly over entire front surface

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5630D1 | Red | 4306D1 |
| 5630D5 | Green | 4306D5 |
| 5630D7 | Yellow | 4306D7 |

### OUTLINE DIMENSIONS




HOLE PATTERN REQUIRED

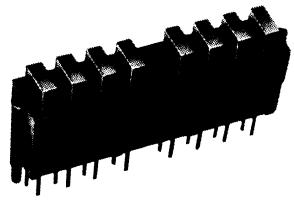
ALL DIMENSIONS ARE IN INCHES (MM).

# PC BOARD MOUNTED LEDs

## SERIES 5638D

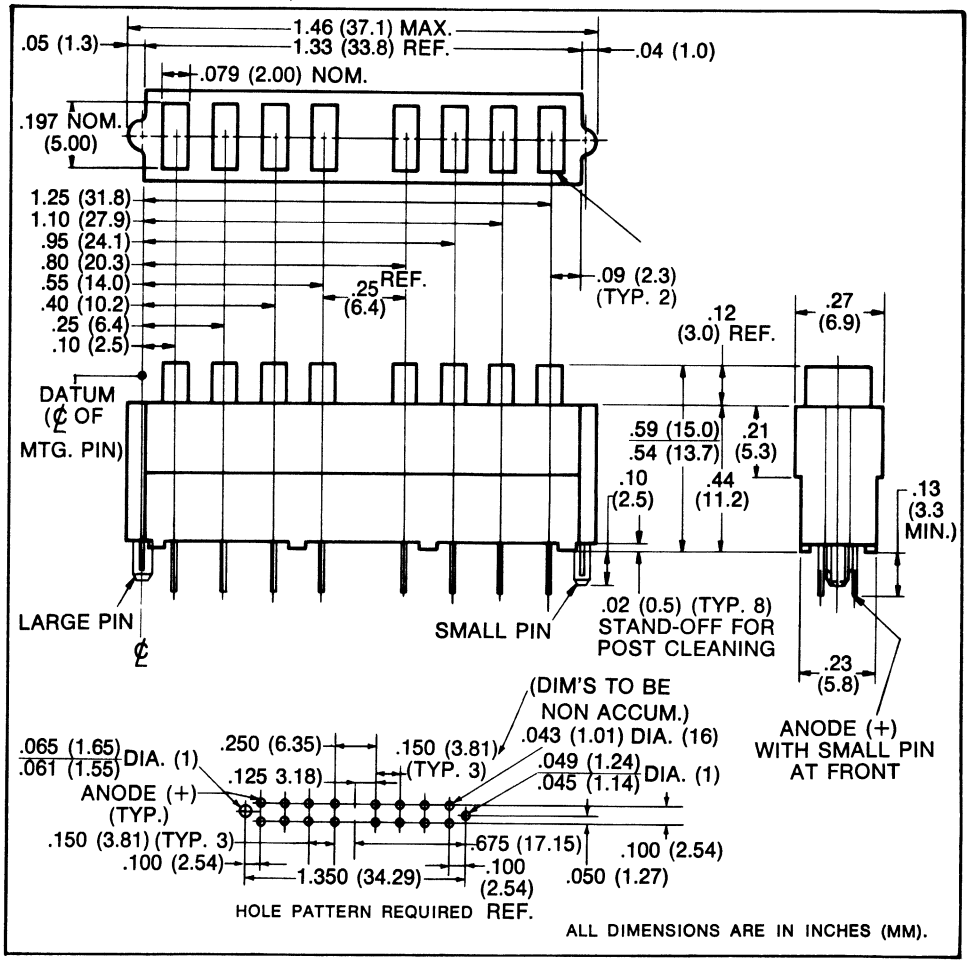
**FEATURES**
- Octal assembly permits economical purchase, easy mounting of 8 LEDs
- Press-in mounting for accurate location on printed circuit board

**Housing:** Black nylon



| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5638D1 | Red | 4306D1 |

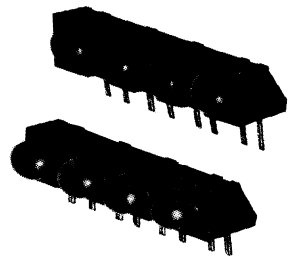
### OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# PC BOARD MOUNTED LEDs

## SERIES 5640E, 5640H

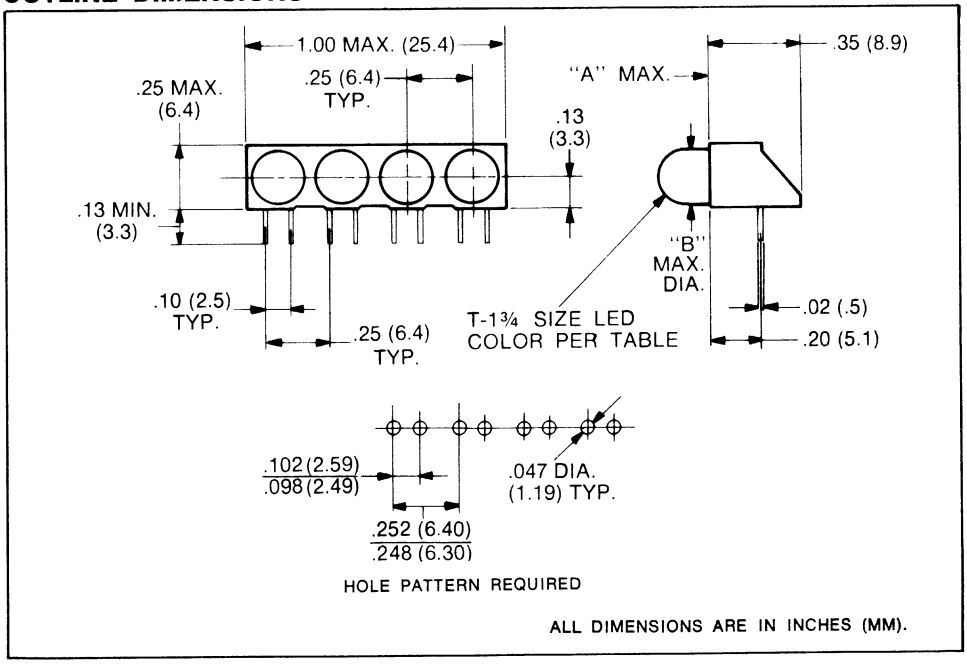


**FEATURES**
- Quad assembly permits economical purchase, easy mounting of 4 LEDs
- Includes board stand-off to prevent flux entrapment — permit easy washing

**Housing:** Black nylon

| MODEL NO. | COLOR | INCORPORATES LED | DIM. "A" | DIM. "B" |
|---|---|---|---|---|
| 5640E1 | Red | 4300E1NF | .13 (3.3) | .21 (5.3) |
| 5640E5 | Green | 4300E5NF | .13 (3.3) | .21 (5.3) |
| 5640E7 | Yellow | 4300E7NF | .13 (3.3) | .21 (5.3) |
| 5640H1 | Red | 4304H1 | .19 (4.8) | .20 (5.0) |
| 5640H5 | Green | 4304H5 | .19 (4.8) | .20 (5.0) |
| 5640H7 | Yellow | 4304H7 | .19 (4.8) | .20 (5.0) |

### OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# SERIES 5705H

**FEATURES** • T-1¾ **SUPER-BRITE** LEDs

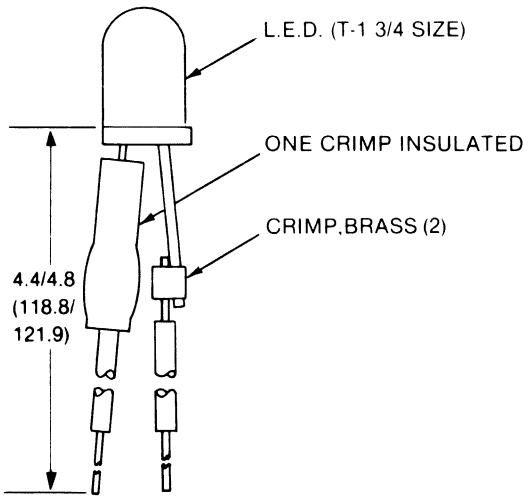
**Wire Leads:** No. 24 AWG, 4.4/4.8 (111.8/121.9) stripped .43/.57 (10.9/14.5)

**Anode (+):** Red lead

**Lens:** Ideal for use with 4311 or 4321 Series lenses (See page 73)

| MODEL NO. | COLOR | INCORPORATES LED |
|---|---|---|
| 5705H1 | Red | 4305H1 |
| 5705H5 | Green | 4305H5 |
| 5705H7 | Yellow | 4305H7 |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# LED MOUNTING CLIP FOR T-1¾ SIZE LEDs

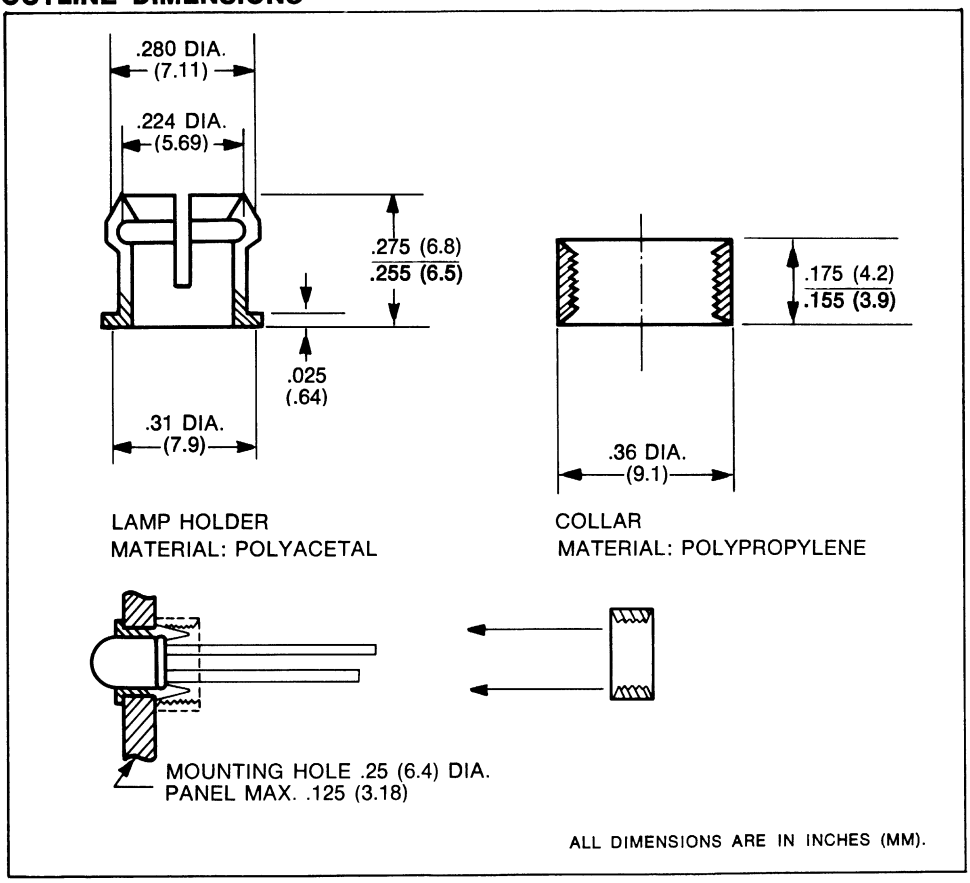
## MODEL 4304MC, ¼" DIA.

**FEATURES** • This attractive and economical mounting clip installs quickly and provides secure mounting for T-1¾ high dome LEDs such as 4301H, 4304H, or 4305H Series.

**Material:** Black polypropylene

**Mounting Hole:** .250 (6.35) min. dia. in panels up to .125 (3.18) thick.

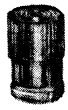
**OUTLINE DIMENSIONS**



# ROUND & SQUARE LED LENSES FOR T-1¾ LEDs

## SERIES 4311 ¼" DIA.

**FEATURES** • These lenses provide quick and economical panel mounting, plus electrostatic discharge protection, for T-1¾ high dome LEDs. Molded in Fresnel rings spread light evenly, provide wide viewing angle viewing (up to 180°) and bright attractive appearance. Use with narrow-beam LED series 4305H, 4308H and 4310H.

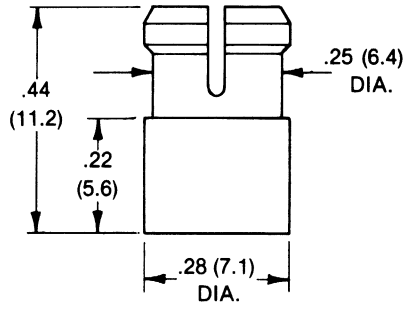


**Mounting:** Snap into .248/.252 (6.30/6.40) dia. hole.

**Material:** Cellulose acetate butyrate

| MODEL NO. ROUND | LENS COLOR |
|---|---|
| 4311 | Red |
| 4312 | Clear |
| 4315 | Green |
| 4317 | Yellow |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# ROUND & SQUARE LED LENSES FOR T-1¾ LEDs

## SERIES 4321 ¼" SQ.

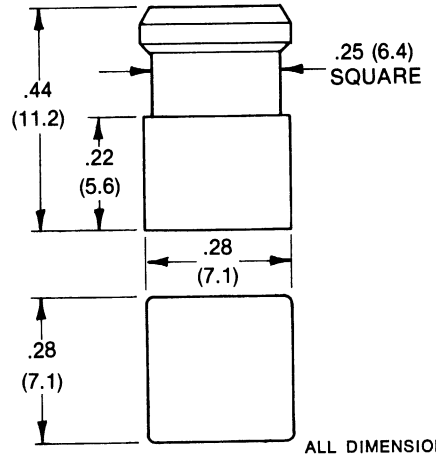
**FEATURES** • These lenses provide quick and economical panel mounting, plus electrostatic discharge protection, for T-1¾ high dome LEDs. Molded in Fresnel rings spread light evenly, provide wide viewing angle viewing (up to 180°) and bright attractive appearance. Use with narrow-beam LED series 4305H, 4308H and 4310H.

**Mounting:** Snap into .248/.252 (6.30/6.40) square hole in panels .06/.13 (1.5/3.3) thick. Square lenses may also be gang mounted in slotted hole. .248/.252 (6.30/6.40) wide. .280 (7.00) times number of lenses minus .030 (.76) long.

**Material:** Cellulose acetate butyrate

| MODEL NO. SQUARE | LENS COLOR |
|---|---|
| 4321 | Red |
| 4322 | Clear |
| 4325 | Green |
| 4327 | Yellow |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# ROUND LED LENS FOR T-1 LEDs

## SERIES 4331 11/64" DIA.

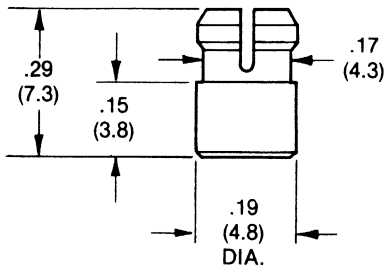
**FEATURES** • This is a smaller version of the 4311 series lenses and is designed for T-1 LEDs rather than T-1¾ LEDs. The plastic lens provides protection against electrostatic discharge.

**Mounting:** Snap into .170/ .174 (4.32/ 4.42) dia. hole in panels .03- .06 (.8-1.5) thick.

**Material:** Cellulose acetate butyrate

| MODEL NO. ROUND | LENS COLOR |
|---|---|
| 4331 | Red |
| 4335 | Green |
| 4337 | Yellow |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# ROUND PANEL LENSES FOR T-1¾ PC BOARD MOUNTED LEDs

## SERIES 4341 $^{23}/_{64}$" (9mm) DIA.

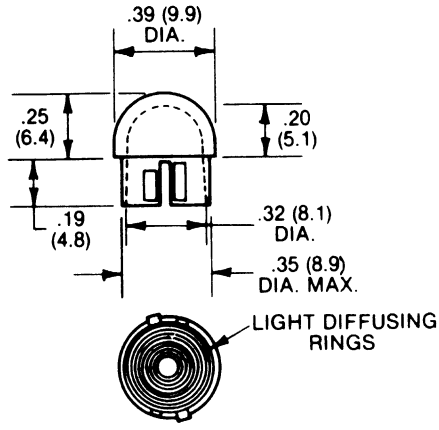
**FEATURES** • Attractive snap-in panel lenses provide wide-angle viewing plus mechanical security and electrostatic discharge protection. Generous clearance and "forgiving" optics speed product assembly. Ideal for use with narrow beam LEDs, such as 4305H, 4308H or 4310H series — or use with incandescent lamps.

**Mounting:** Snap into .354/.360 (9.00/9.14) dia hole in panels .03-.08 (.76-2.03) thick.

**Material:** Polycarbonate

| MODEL NO. | LENS COLOR |
|---|---|
| 4341 | Red |
| 4342 | Clear |
| 4343 | Amber |
| 4344 | White |
| 4345 | Green |
| 4346 | Blue |
| 4347 | Yellow |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# ROUND PANEL LENS FOR T-1 LEDs

## SERIES 4350 3/16" DIA.

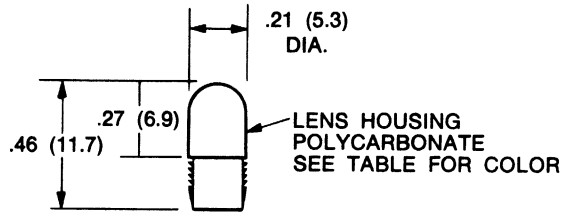
**FEATURES** • Attractive snap-in panel lenses provide wide-angle viewing plus mechanical security and electrostatic discharge protection. Ideal for use with T-1 LEDs such as 4303F series.

**Mounting:** Snap into .187/.192 (4.75/4.87) dia. hole in panels .020/.097 (.51/2.46) thick.

**Material:** Polycarbonate

| MODEL NO. | LENS COLOR |
|---|---|
| 4351 | Red |
| 4352 | Clear |
| 4353 | Amber |
| 4354 | White |
| 4355 | Green |
| 4356 | Blue |
| 4357 | Yellow |

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# NEON GLOW LAMPS

Neon lamps are ideal for line-voltage AC as well as for 90V and up DC applications. They are rugged and long-lived; properly specified neon lamps will outlast the equipment in which they are incorporated.

IDI 4900 series neon lamps have tinned leads, and are ideal for use on printed circuit boards. Unique sizes, colors, and voltage characteristics provide a wide range of options.

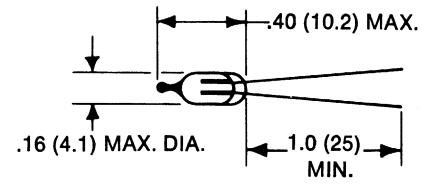
Plain glass lamps include both standard brightness and high brightness types, and include a unique high-current lamp for greater light output and a unique high brightness low voltage lamp. Green, blue, and amber lamps have a phosphor coating on the inside of the glass envelope to convert the typical orange-red neon glow to other colors, and are available in both miniature and sub-miniature sizes.

A wide variety of complete panel-mounted neon indicator lights is listed in the "non-relampable" section of this catalog.

# NEON GLOW LAMPS

## MODELS 4915H5, 4915H6, 4915H7

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

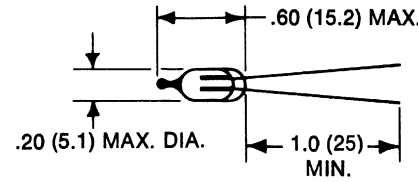
| MODEL NO. | LAMP TYPE | CIRCUIT VOLTAGE (VAC) | MAX. FIRING VOLTAGE (NOTE 5) (VAC) | TYP. MAINTAINING VOLTAGE (NOTE 6) (VAC) | END OF LIFE FIRING VOLTAGE (VAC) | NOMINAL CURRENT (mA) | RECOMMENDED EXT. RESISTOR FOR SHOWN CIRCUIT VOLTAGE (NOTE 4) (OHMS) | AVERAGE USEFUL LIFE AT RATED CURRENT (HRS) AC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 4915H5 | — | 95-120 | 95 | 40 | — | 0.7 | 100,000 | 10,000 | Green Sub-Miniature |
| 4915H6 | — | 95-120 | 95 | 40 | — | 0.7 | 100,000 | 10,000 | Blue Sub-Miniature |
| 4915H7 | — | 95-120 | 95 | 40 | — | 0.7 | 100,000 | 10,000 | Orange Sub-Miniature |

**NOTES:** 1. Leads are Tinned.
2. DC life is 60% of AC life.
3. All lamps must be ballasted.
4. All lamps may be used on higher voltages with appropriate value resistor in series.
5. Max. firing voltage when lamp is new, for high brightness lamps voltage increases as lamp ages.
6. Voltage measured across lamp at design current.

# NEON GLOW LAMPS

## MODELS 4920H5, 4920H6, 4920H7

### OUTLINE DIMENSIONS



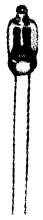

ALL DIMENSIONS ARE IN INCHES (MM).

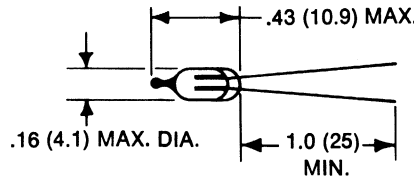
| MODEL NO. | LAMP TYPE | CIRCUIT VOLTAGE (VAC) | MAX. FIRING VOLTAGE (NOTE 5) (VAC) | TYP. MAINTAINING VOLTAGE (NOTE 6) (VAC) | END OF LIFE FIRING VOLTAGE (VAC) | NOMINAL CURRENT (mA) | RECOMMENDED EXT. RESISTOR FOR SHOWN CIRCUIT VOLTAGE (NOTE 4) (OHMS) | AVERAGE USEFUL LIFE AT RATED CURRENT (HRS) AC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 4920H5 | — | 95-120 | 95 | 40 | — | 0.8 | 91,000 | 10,000 | Green Miniature |
| 4920H6 | — | 95-120 | 95 | 40 | — | 0.8 | 91,000 | 10,000 | Blue Miniature |
| 4920H7 | — | 95-120 | 95 | 40 | — | 0.8 | 91,000 | 10,000 | Orange Miniature |

**NOTES:** 1. Leads are Tinned.
2. DC life is 60% of AC life.
3. All lamps must be ballasted.
4. All lamps may be used on higher voltages with appropriate value resistor in series.
5. Max. firing voltage when lamp is new, for high brightness lamps voltage increases as lamp ages.
6. Voltage measured across lamp at design current.

# MODELS 4916S1, 4916H1

## OUTLINE DIMENSIONS





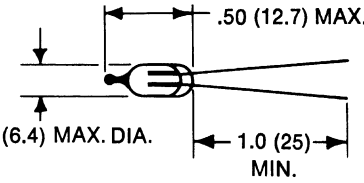

ALL DIMENSIONS ARE IN INCHES (MM).

| MODEL NO. | LAMP TYPE | CIRCUIT VOLTAGE (VAC) | MAX. FIRING VOLTAGE (NOTE 5) (VAC) | TYP. MAINTAINING VOLTAGE (NOTE 6) (VAC) | END OF LIFE FIRING VOLTAGE (VAC) | NOMINAL CURRENT (mA) | RECOMMENDED EXT. RESISTOR FOR SHOWN CIRCUIT VOLTAGE (NOTE 4) (OHMS) | AVERAGE USEFUL LIFE AT RATED CURRENT (HRS) AC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 4916S1 | 2ML | 85-125 | 65 | 40 | — | 0.3 | 150,000 | 25,000 | Standard Brightness Sub-Miniature |
| 4916H1 | 1MH | 105-125 | 100 | 40 | — | 0.7 | 100,000 | 5,000 | High Brightness Sub-Miniature |

**NOTES:**
1. Leads are Tinned.
2. DC life is 60% of AC life.
3. All lamps must be ballasted.
4. All lamps may be used on higher voltages with appropriate value resistor in series.
5. Max. firing voltage when lamp is new, for high brightness lamps voltage increases as lamp ages.
6. Voltage measured across lamp at design current.

# MODELS 4921S1, 4921H1

## OUTLINE DIMENSIONS



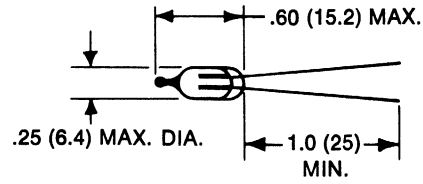

ALL DIMENSIONS ARE IN INCHES (MM).

| MODEL NO. | LAMP TYPE | CIRCUIT VOLTAGE (VAC) | MAX. FIRING VOLTAGE (NOTE 5) (VAC) | TYP. MAINTAINING VOLTAGE (NOTE 6) (VAC) | END OF LIFE FIRING VOLTAGE (VAC) | NOMINAL CURRENT (mA) | RECOMMENDED EXT. RESISTOR FOR SHOWN CIRCUIT VOLTAGE (NOTE 4) (OHMS) | AVERAGE USEFUL LIFE AT RATED CURRENT (HRS) AC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 4921S1 | A1B | 75-125 | 65 | 40 | — | 0.3 | 220,000 | 25,000 | Standard Brightness Miniature |
| 4921H1 | A1C | 105-125 | 95 | 50 | — | 1.2 | 47,000 | 25,000 | High Brightness Miniature |

**NOTES:**
1. Leads are Tinned.
2. DC life is 60% of AC life.
3. All lamps must be ballasted.
4. All lamps may be used on higher voltages with appropriate value resistor in series.
5. Max. firing voltage when lamp is new, for high brightness lamps voltage increases as lamp ages.
6. Voltage measured across lamp at design current.

# MODEL 4924J1

## OUTLINE DIMENSIONS



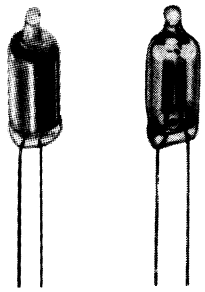

ALL DIMENSIONS ARE IN INCHES (MM).

| MODEL NO. | LAMP TYPE | CIRCUIT VOLTAGE (VAC) | MAX. FIRING VOLTAGE (NOTE 5) (VAC) | TYP. MAINTAINING VOLTAGE (NOTE 6) (VAC) | END OF LIFE FIRING VOLTAGE (VAC) | NOMINAL CURRENT (mA) | RECOMMENDED EXT. RESISTOR FOR SHOWN CIRCUIT VOLTAGE (NOTE 4) (OHMS) | AVERAGE USEFUL LIFE AT RATED CURRENT (HRS) AC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 4924J1 | — | 100 | 55 | 40 | 75 | 1.5 | 33,000 | 10,000 | Low Voltage High Brightness |

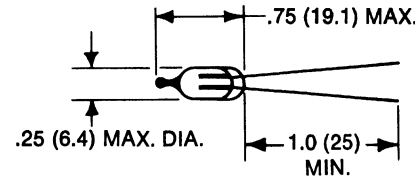
**NOTES:** 1. Leads are Tinned.
2. DC life is 60% of AC life.
3. All lamps must be ballasted.
4. All lamps may be used on higher voltages with appropriate value resistor in series.
5. Max. firing voltage when lamp is new, for high brightness lamps voltage increases as lamp ages.
6. Voltage measured across lamp at design current.

# NEON GLOW LAMPS

## MODELS 4925H1, 4925H5, 4925H6, 4925H7, 4925S1



### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

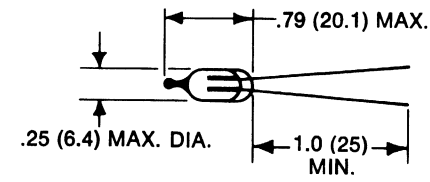
| MODEL NO. | LAMP TYPE | CIRCUIT VOLTAGE (VAC) | MAX. FIRING VOLTAGE (NOTE 5) (VAC) | TYP. MAINTAINING VOLTAGE (NOTE 6) (VAC) | END OF LIFE FIRING VOLTAGE (VAC) | NOMINAL CURRENT (mA) | RECOMMENDED EXT. RESISTOR FOR SHOWN CIRCUIT VOLTAGE (NOTE 4) (OHMS) | AVERAGE USEFUL LIFE AT RATED CURRENT (HRS) AC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 4925H1 | C2A | 105-125 | 95 | 65 | — | 1.9 | 30,000 | 25,000 | High Brightness |
| 4925H5 | G2B | 95-120 | 95 | 40 | — | 1.6 | 36,000 | 20,000 | Green |
| 4925H6 | T2B | 95-120 | 95 | 40 | — | 1.6 | 36,000 | 20,000 | Blue |
| 4925H7 | — | 95-120 | 95 | 40 | — | 1.6 | 36,000 | 20,000 | Orange |
| 4925S1 | A9A | 75-125 | 65 | 40 | — | 0.7 | 100,000 | 10,000 | Standard Brightness |

**NOTES:**
1. Leads are Tinned.
2. DC life is 60% of AC life.
3. All lamps must be ballasted.
4. All lamps may be used on higher voltages with appropriate value resistor in series.
5. Max. firing voltage when lamp is new, for high brightness lamps voltage increases as lamp ages.
6. Voltage measured across lamp at design current.

# NEON GLOW LAMPS

## MODEL 4925U1

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| MODEL NO. | LAMP TYPE | CIRCUIT VOLTAGE (VAC) | MAX. FIRING VOLTAGE (NOTE 5) (VAC) | TYP. MAINTAINING VOLTAGE (NOTE 6) (VAC) | END OF LIFE FIRING VOLTAGE (VAC) | NOMINAL CURRENT (mA) | RECOMMENDED EXT. RESISTOR FOR SHOWN CIRCUIT VOLTAGE (NOTE 4) (OHMS) | AVERAGE USEFUL LIFE AT RATED CURRENT (HRS) AC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 4925U1 | — | 105-125 | 85 | 45 | 95 | 5.0 | 8,200 | 15,000 | High Current High Brightness |

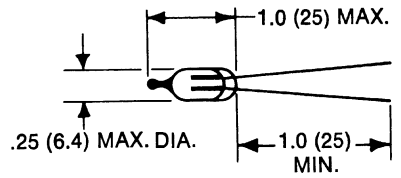
**NOTES:**
1. Leads are Tinned.
2. DC life is 60% of AC life.
3. All lamps must be ballasted.
4. All lamps may be used on higher voltages with appropriate value resistor in series.
5. Max. firing voltage when lamp is new, for high brightness lamps voltage increases as lamp ages.
6. Voltage measured across lamp at design current.

NEON

# NEON GLOW LAMPS

## MODEL 4926H1

### OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

| MODEL NO. | LAMP TYPE | CIRCUIT VOLTAGE (VAC) | MAX. FIRING VOLTAGE (NOTE 5) (VAC) | TYP. MAINTAINING VOLTAGE (NOTE 6) (VAC) | END OF LIFE FIRING VOLTAGE (VAC) | NOMINAL CURRENT (mA) | RECOMMENDED EXT. RESISTOR FOR SHOWN CIRCUIT VOLTAGE (NOTE 4) (OHMS) | AVERAGE USEFUL LIFE AT RATED CURRENT (HRS) AC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| 4926H1 | C6A | 105-125 | 95 | 50 | — | 2.0 | 18,000 | 10,000 | Long Electrode High Brightness |

**NOTES:**
1. Leads are Tinned.
2. DC life is 60% of AC life.
3. All lamps must be ballasted.
4. All lamps may be used on higher voltages with appropriate value resistor in series.
5. Max. firing voltage when lamp is new, for high brightness lamps voltage increases as lamp ages.
6. Voltage measured across lamp at design current.

# PC BOARD MOUNTED NEON

## MODEL 5314N1

Board Mounted Neon Lamp

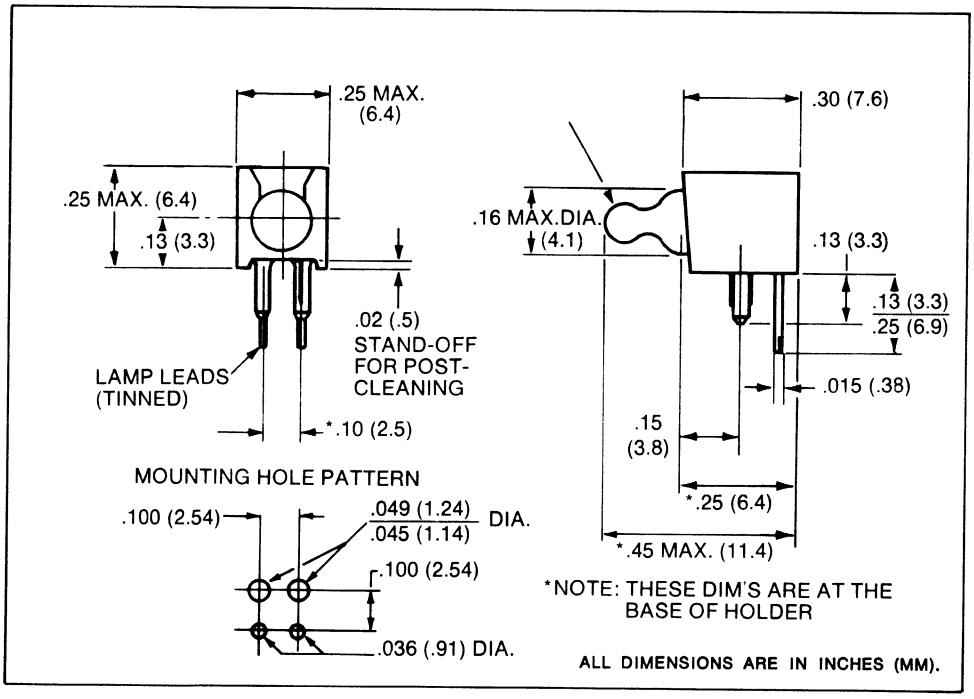
- Easy to mount
- Press in mounting for accurate location on printed circuit board
- Includes board standoff to prevent flux entrapment — permit easy washing

**FEATURES** **Housing:** Black nylon

**Lamp:** 4916H1 (see page 81)

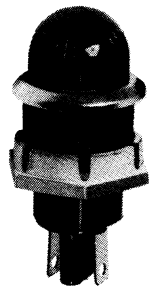


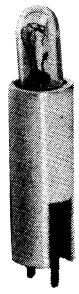
### OUTLINE DIMENSIONS

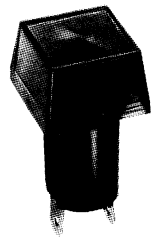


# Relampable

## INDICATOR LIGHTS







IDI offers two lines of relampable sockets and light assemblies — TINY-MITE and MINI-SLIDE — each designed to best utilize a different type of lamp.

The IDI TINY-MITE series of sockets and pilot light assemblies was designed around the sub-miniature wedge base lamp (T-1¾). The ruggedness and reliability of wedge base design has been proved by the annual use of hundreds of millions of wedge base lamps. The design is economical because the base is formed from the glass of the bulb and the lead in the wire — there are no separate parts of extra welded connections. Made on high-speed automatic equipment, wedge base lamps cost much less than equivalent flange base or bi-pin lamps.

# RELAMPABLE
# INTRODUCTION

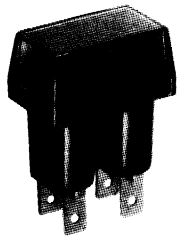


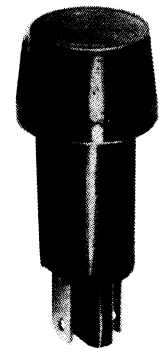
Thirteen different lamps are presently available with voltage ratings ranging from 2.5 volts to 28 volts.

These new lamps present unusual opportunities as well as intriguing challenges to the socket designer. IDI has met the challenge with a unique contact-socket which holds the lamp firmly and makes assured contact, yet does not inhibit lamp removal. The unique IDI socket construction takes full advantage of the space and cost economies of the sub-miniature wedge base lamp.

MINI-SLIDE pilot light assemblies, individual sockets, and multi-strips utilize miniature slide-base incandescent lamps. These convenient high intensity lamps are energized by means of nickel-plated contacts set inside the socket. The lamps are extremely long-lived and can be supplied in a range of voltages from 4 volts to 120 volts and ratings up to three watts. Lamps are available in two lengths — the shorter "Indicator" lamps and the longer "Pilot" lamps.

Attractive on or off, MINI-SLIDE pilot lights are easy to install with push-on speednut mounting. Connection can be made by soldering, or with quick-connect receptacles. In case of lamp failure, it is easy to unscrew or snap off the lens, depending on the model. There is never any need to use tools or go behind a panel for bulb replacement. Bright, highly visible MINI-SLIDE pilot lights are available in a wide variety of colors. IDI also offers color end caps for use with MINI-SLIDE individual sockets and multi-socket strips.





# SUB-MINIATURE (T-1¾) WEDGE-BASE LAMPS

**FEATURES**
- Attractive
- Compact
- Easy lamp insertion and removal
- Economical

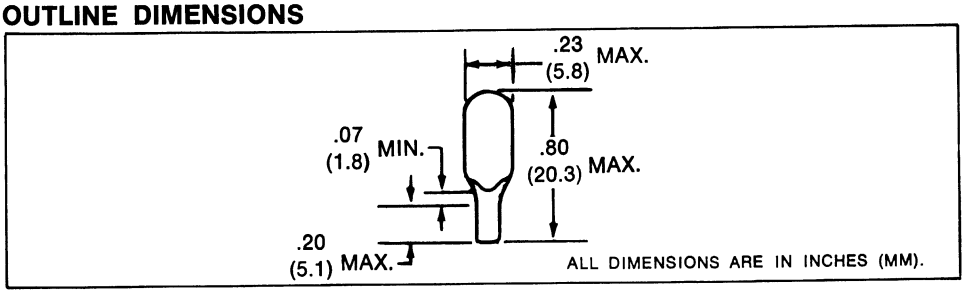
TINY-MITE indicator light assemblies and sockets feature a unique socket construction which holds the lamp securely, makes contact reliably, and will not loosen with vibration or shock, yet permits easy lamp removal and replacement.

TINY-MITE 4600 Series indicator light assemblies are extremely attractive, rugged, and reliable, yet utilize minimal panel space. TINY-MITE 4100 Series sub-miniature wedge-base lamp sockets are available in both lead and solder terminal versions, as well as in a printed circuit board version.

The ruggedness and reliability of wedge-base lamps has been proved by the annual use of hundreds of millions of units. Wedge-base design is economical because the base is formed from the glass of the bulb and lead-in wires. There are no separate parts or extra welded connections. There are 13 different types presently available with voltage ratings ranging from 2.5 volts to 28 volts.

| LAMP NO. | DESIGN VOLTAGE | DESIGN AMPS | CANDLE POWER (APPROX.) | RATED LIFE HOURS |
|---|---|---|---|---|
| 11 | 2.5 | .20 | .20 | 1,000 |
| 56 | 5 | .115 | .15 | 20,000 |
| 79 | 6 | .20 | .60 | 1,000 |
| 84 | 6.3 | .04 | .03 | 20,000 |
| 16 | 6.3 | .15 | .34 | 5,000 |
| 86 | 6.3 | .20 | .40 | 20,000 |
| 18 | 14 | .04 | .13 | 5,000 |
| 73 | 14 | .08 | .30 | 15,000 |
| 37 | 14 | .09 | .50 | 1,500 |
| 74 | 14 | .10 | .70 | 500 |
| 70 | 14 | .15 | .15 | 100 |
| 85 | 28 | .04 | .30 | 7,000 |
| 17 | 28 | .06 | .65 | 5,000 |

## OUTLINE DIMENSIONS



# SERIES 4600 3/8" DIA.

**FEATURES**

**Ordering Information:** The complete assembly consists of socket plus lens plus lamp.

**Mounting:** Model 4611 (threaded) supplied with zinc finished hex nut and internal tooth lock washer.

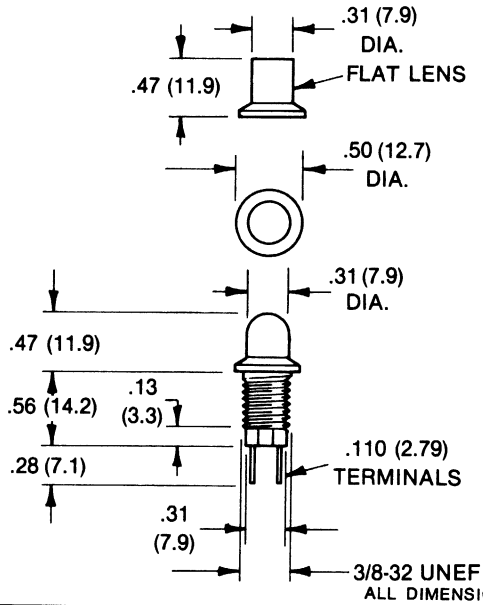
**Lens:** Polycarbonate — twist on, positively held

**Bezel:** Polished stainless steel

**Socket:** Black nylon

| LENS COLOR TABLE | | |
|---|---|---|
| COLOR | ROUND LENS NO. | FLAT LENS NO. |
| Red | 4621 | 4631 |
| Clear | 4622 | 4632 |
| Amber | 4623 | 4633 |
| White | 4624 | 4634 |
| Green | 4625 | 4635 |
| Blue | 4626 | 4636 |
| Yellow | 4627 | 4637 |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 4610 3/8" DIA.

**FEATURES**

**Ordering Information:** The complete assembly consists of socket plus lens plus lamp.

**Mounting:** Model 4610 (without thread) supplied with push-on speednut SN 3486 (page 170). Mounting hole can be keyed to prevent rotation.

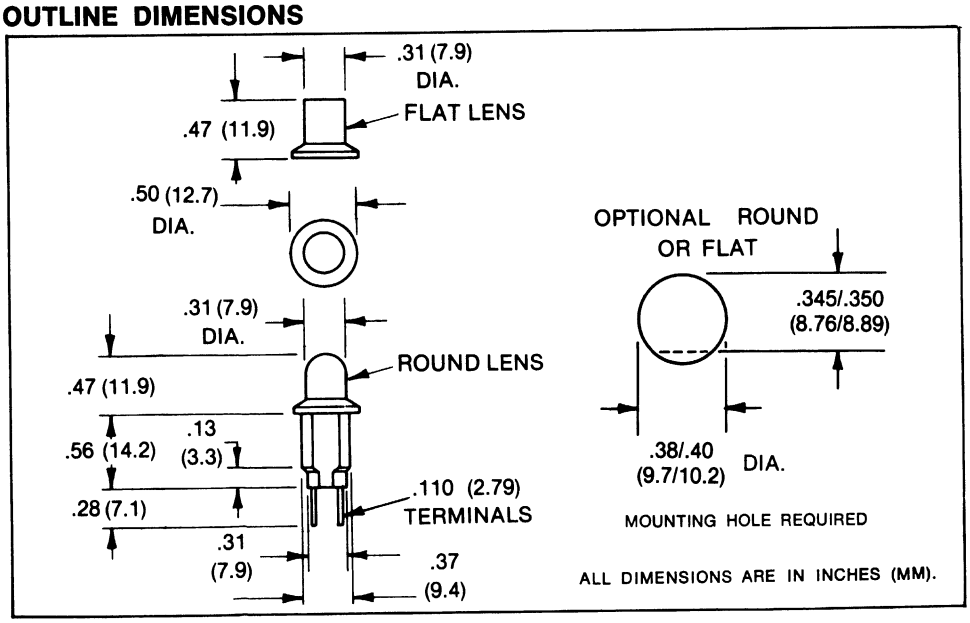
**Lens:** Polycarbonate — twist on, positively held

**Bezel:** Polished stainless steel

**Socket:** Black nylon

| LENS COLOR TABLE | | |
|---|---|---|
| COLOR | ROUND LENS NO. | FLAT LENS NO. |
| Red | 4621 | 4631 |
| Clear | 4622 | 4632 |
| Amber | 4623 | 4633 |
| White | 4624 | 4634 |
| Green | 4625 | 4635 |
| Blue | 4626 | 4636 |
| Yellow | 4627 | 4637 |

## OUTLINE DIMENSIONS



# MODEL 4100 5/16" DIA.—KEYED

**FEATURES**

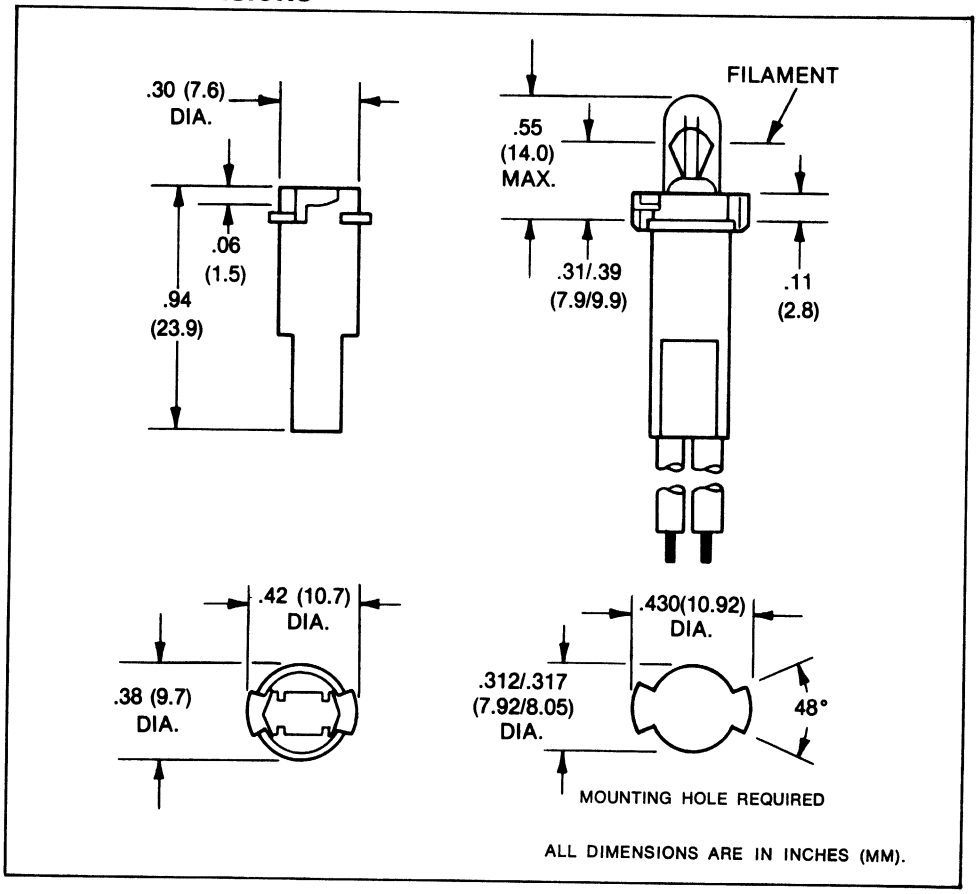
**Mounting:** For rear insertion in .06 (1.5) thick plastic panels or .050/.055 (1.27/1.40) thick metal panels.

**Wire Leads:** No. 22 AWG, 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Housing:** White nylon

**Note:** Available with other leads and/or terminals on special order

## OUTLINE DIMENSIONS



# MODEL 4104

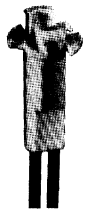
**FEATURES**

**Mounting:** For rear insertion in panels .06 (1.5) thick.

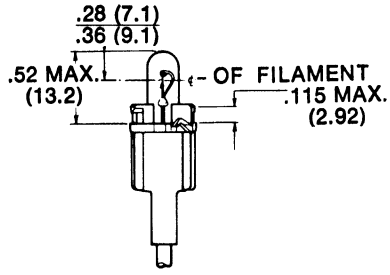
**Wire Leads:** No. 20 AWG, 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

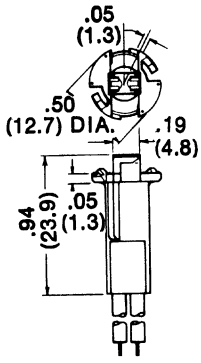
**Housing:** White nylon

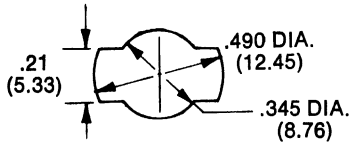
**Note:** Available with other leads and/or terminals on special order



## OUTLINE DIMENSIONS



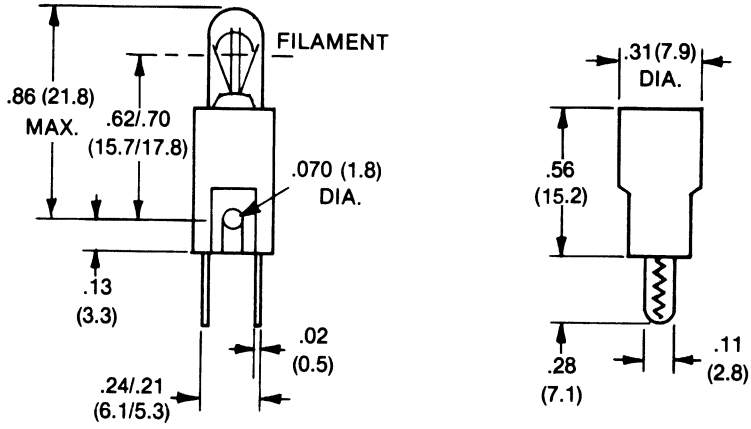

MOUNTING HOLE REQUIRED

ALL DIMENSIONS ARE IN INCHES (MM).

# MODEL 4110

**FEATURES** **Mounting:** Rivet mount
**Terminals:** Tinned brass
**Housing:** White nylon

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

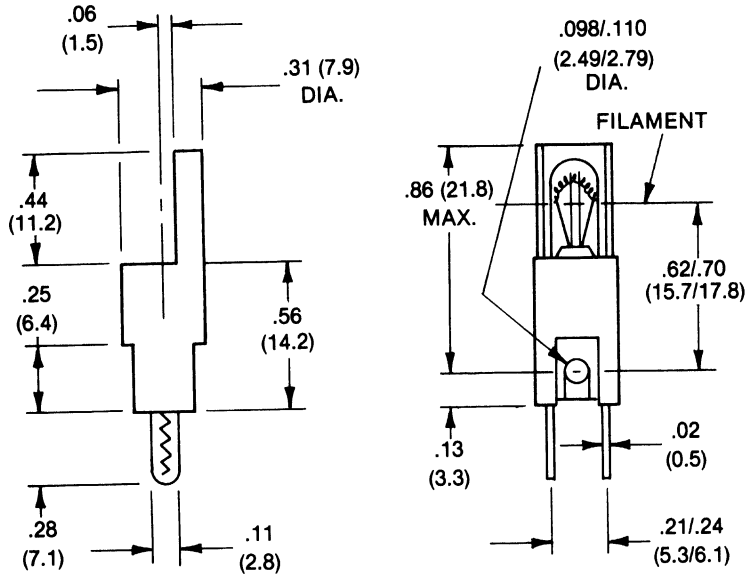
# MODEL 4111

**FEATURES** **Mounting:** Rivet mount

**Terminals:** Tinned brass

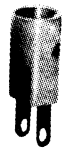
**Housing:**White nylon

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

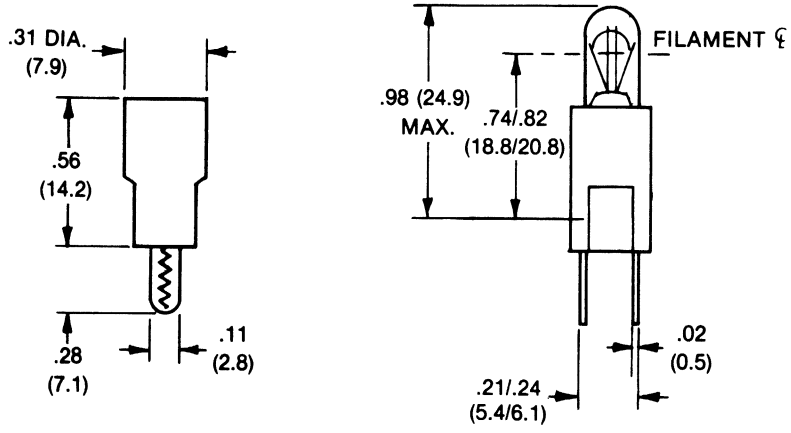
# MODEL 4112



**FEATURES** **Terminals:** Tinned brass

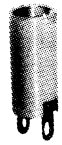
**Housing:** White nylon

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

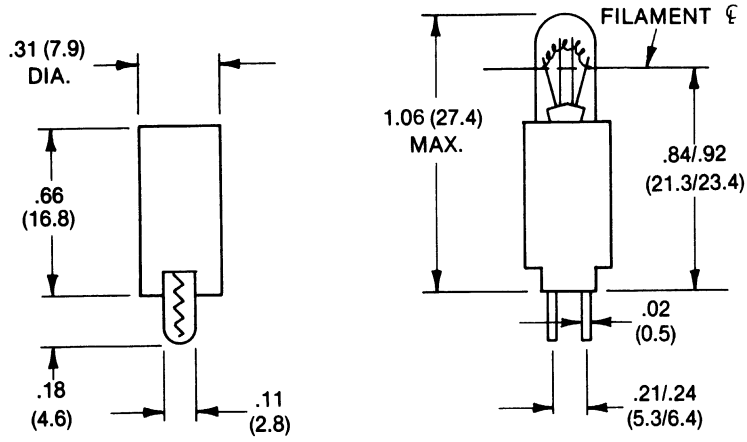
# MODEL 4113



**FEATURES** **Terminals:** Tinned brass

**Housing:** White nylon

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# MODEL 4120

**FEATURES**

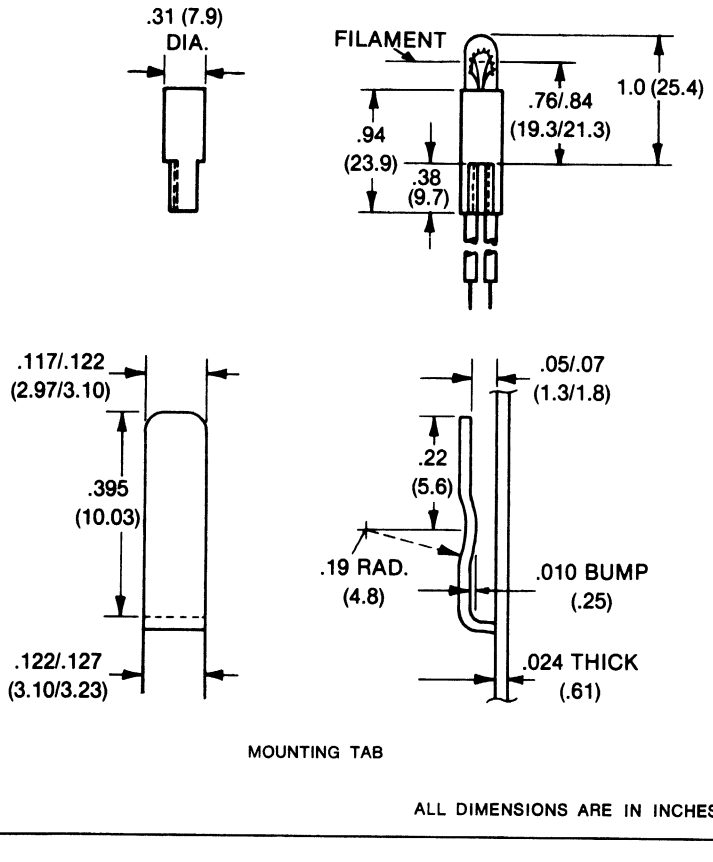
**Mounting:** Tab mount.

**Wire Leads:** No. 22 AWG, 4.5 (114.3) long, stripped .5 (12.7)

**Housing:** White nylon

**Note:** Available with other leads and/or terminals on special order

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

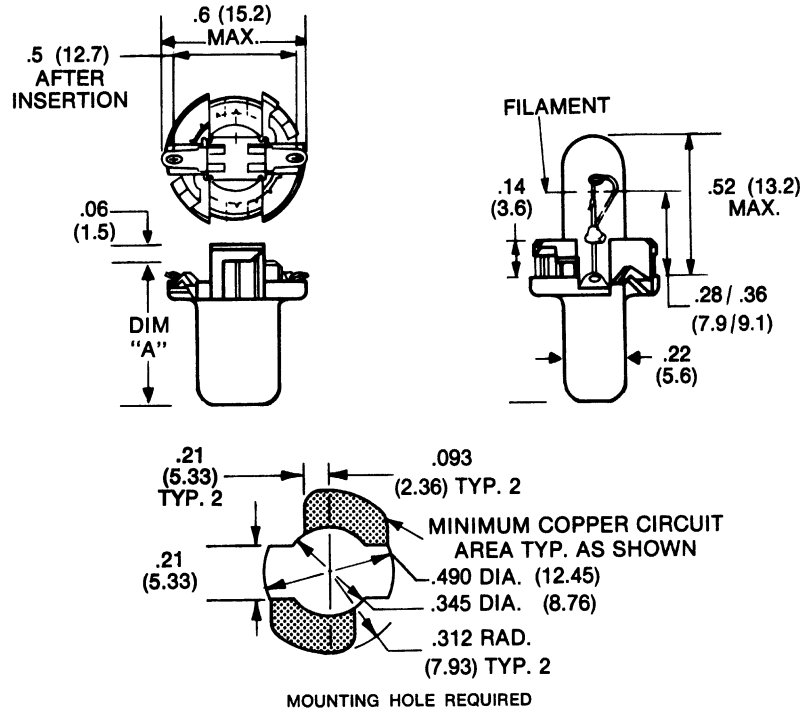
## RELAMPABLE

# MODEL 4130

**FEATURES** **Mounting:** Printed circuit board
**Contacts:** CA-688 alloy
**Housing:** Nylon

| MODEL | DIM. "A" | COLOR |
|---|---|---|
| 4130 | .55 (14.0) | Gray |

## OUTLINE DIMENSIONS



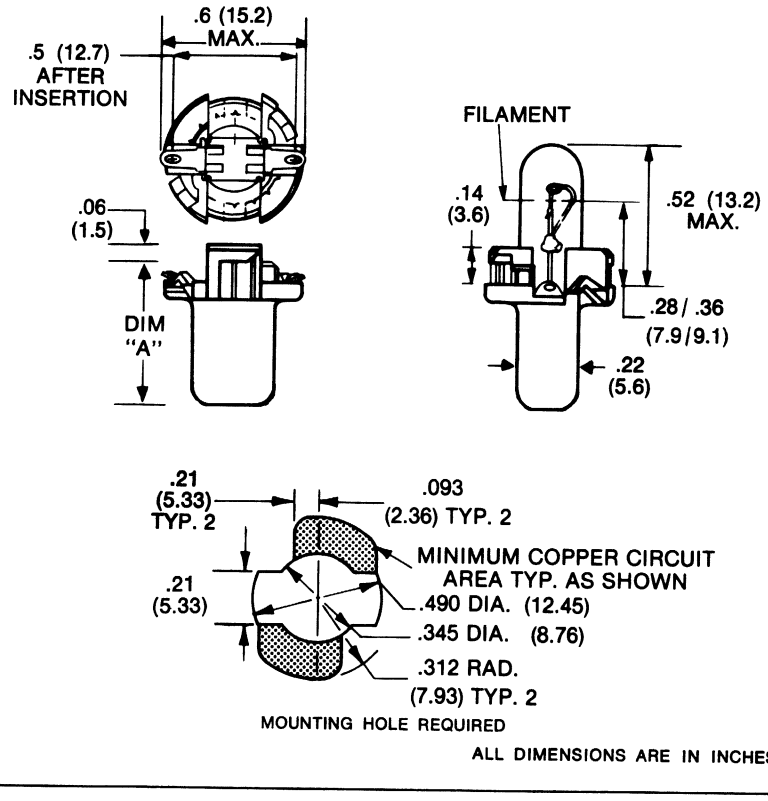

ALL DIMENSIONS ARE IN INCHES (MM).

# MODEL 4133

**FEATURES** **Mounting:** Printed circuit board
**Contacts:** CA-688 alloy
**Housing:** Nylon

| MODEL | DIM. "A" | COLOR |
|---|---|---|
| 4133 | .51 (13.0) | Black |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

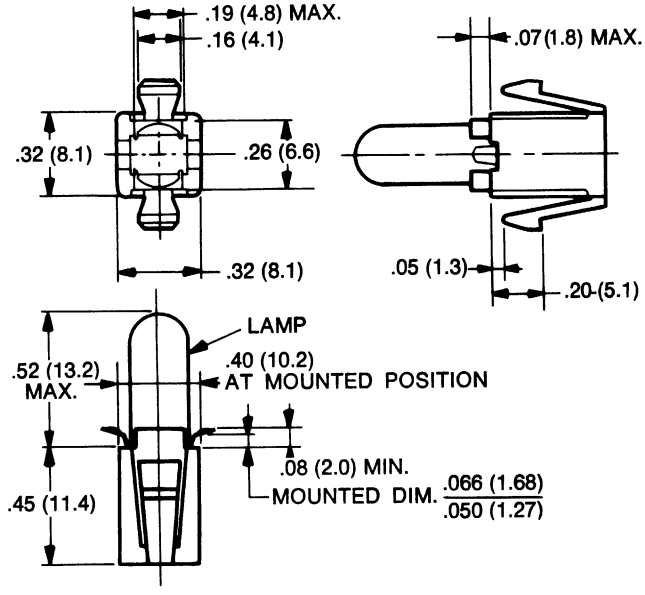
# SERIES 4135

**FEATURES** **Mounting:** Molded panel — printed circuit board snap mount

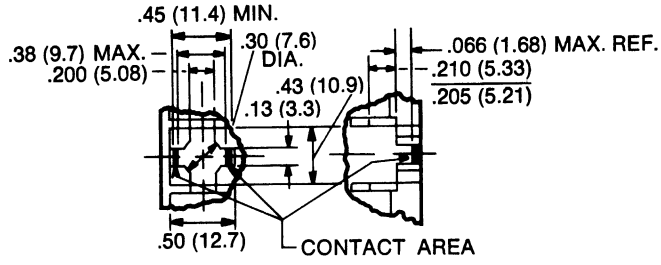
**Contacts:** CA-688 alloy

**Housing:** Black nylon

## OUTLINE DIMENSIONS




SUGGESTED BOARD CLEARANCE AND MOUNTING HOLE WITH CONTACT AREA

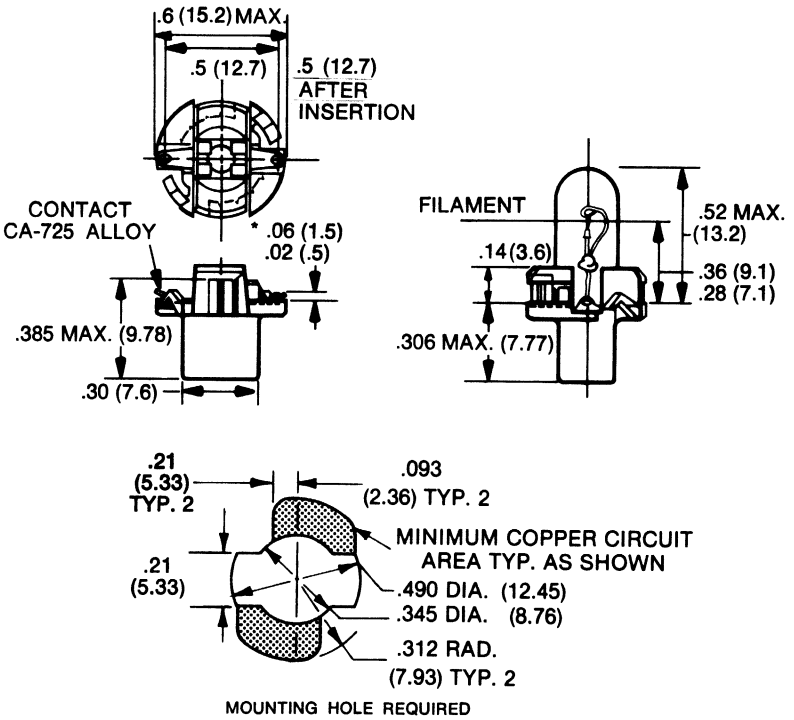



ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 4136

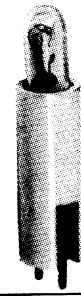
**FEATURES** **Mounting:** Printed circuit board.
**Contacts:** CA-688 alloy
**Housing:** Black nylon

## OUTLINE DIMENSIONS



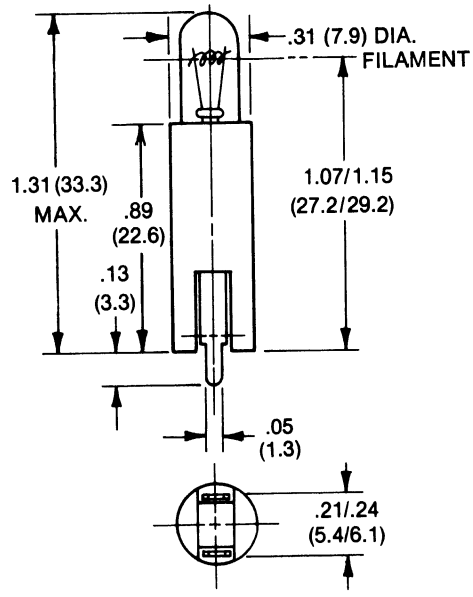

ALL DIMENSIONS ARE IN INCHES (MM).

# MODEL 4140



**FEATURES** **Mounting:** Printed circuit board
**Terminals:** Tinned brass
**Housing:** White nylon

## OUTLINE DIMENSIONS

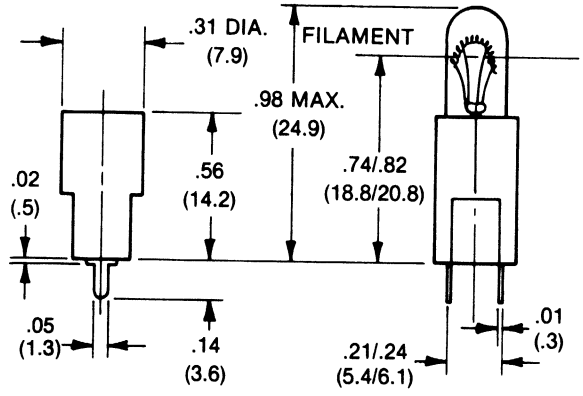



ALL DIMENSIONS ARE IN INCHES (MM).

# MODEL 4141

**FEATURES** **Mounting:** Printed circuit board
**Terminals:** Tinned brass
**Housing:** White nylon

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

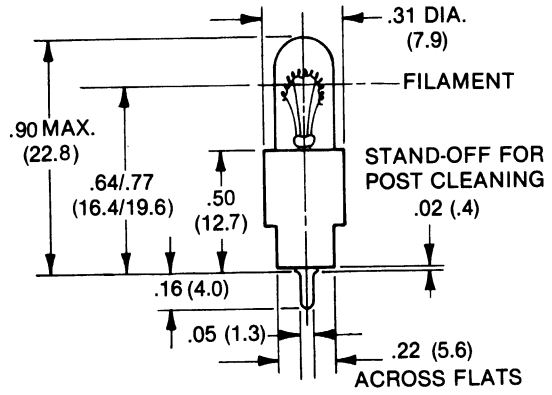
# MODEL 4142, 4142WT

**FEATURES** **Mounting:** Printed circuit board

**Terminals:** Tinned brass

**Housing:** Black nylon for 4142, White nylon for 4142WT

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

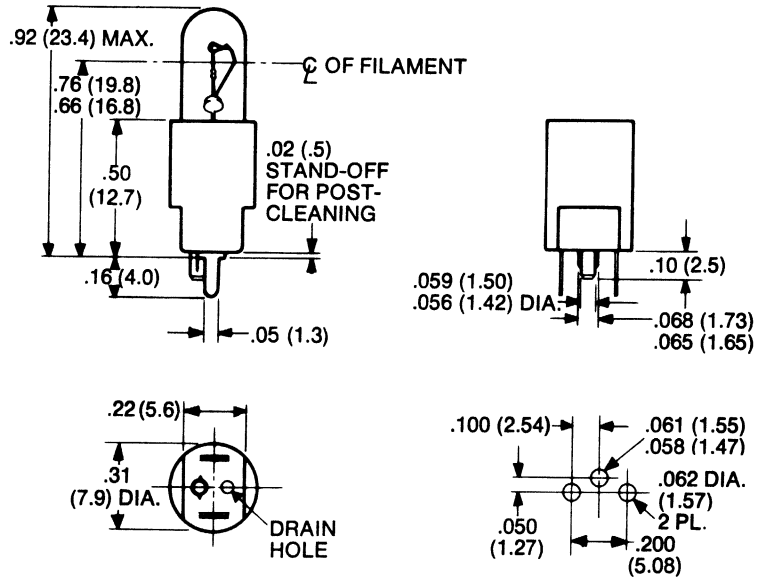
# MODEL 4144

**FEATURES** **Mounting:** Press-in mounting for accurate location on printed circuit board

**Terminals:** Tinned brass

**Housing:** White nylon

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# MODELS 4150, 4150R, 4150L

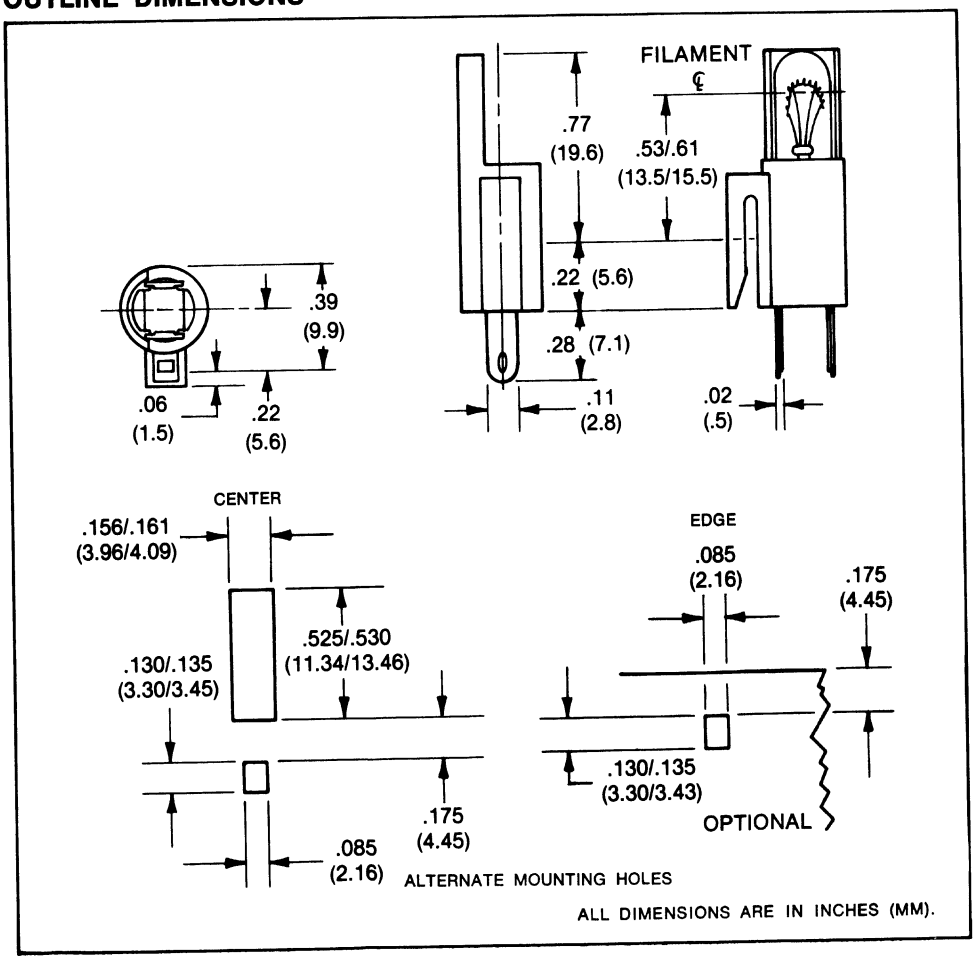
**FEATURES** **Mounting:** Snap-on edge or center.

**Terminals:** Tinned brass

**Housing:** White nylon

| SOCKET NO. | LIGHT SHIELD |
|---|---|
| 4150L | Left Hand (as shown) |
| 4150R | Right Hand |
| 4150 | None |

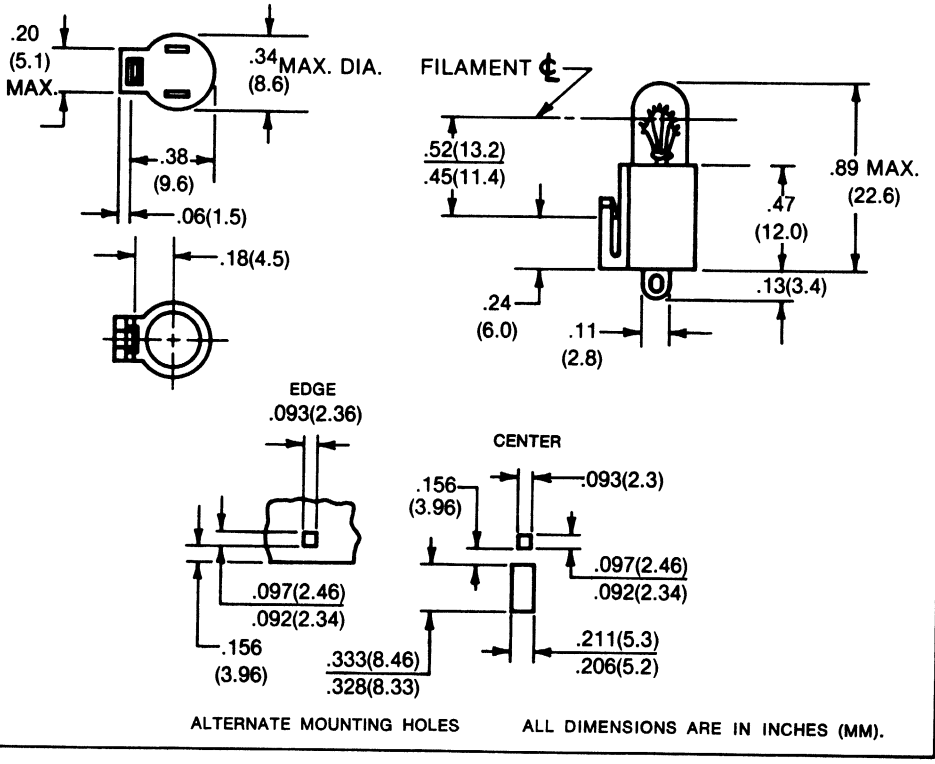
## OUTLINE DIMENSIONS



# MODEL 4151

**FEATURES** **Mounting:** Snap-on edge or center.
**Terminals:** Tinned brass
**Housing:** White nylon

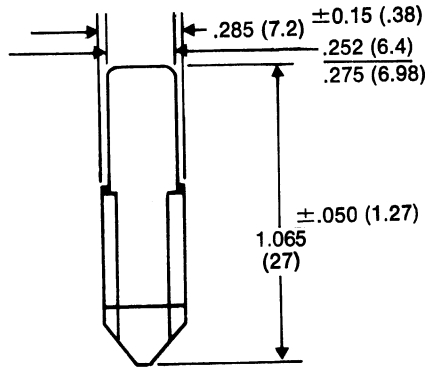
## OUTLINE DIMENSIONS



# T-2 "PILOT" LAMPS

| LAMP NUMBER | DESIGN VOLTS | DESIGN AMPS | RATED AVERAGE LIFE (HRS.) | WATTAGE AT DESIGN VOLTS | AVERAGE END FOOT CANDLES |
|---|---|---|---|---|---|
| 5 SLB | 5 | .120 | 2,500 | .6 | 1,600 |
| 6 PSB | 6 | .140 | 20,000 | .8 | 500 |
| 6 SLB | 6 | .12 | 2,500 | .60 | 1,700 |
| 12 PSB | 12 | .170 | 12,000 | 2.0 | 2,000 |
| 24 PSB | 24 | .073 | 10,000 | 1.7 | 3,000 |
| 28 PSB | 28 | .040 | 5,000 | 1.1 | 1,600 |
| 48 PSB | 48 | .053 | 7,500 | 2.5 | 1,800 |
| 60 PSB | 60 | .050 | 7,500 | 3.0 | 2,600 |
| 120 PSB | 120 | .025 | 10,000 | 3.0 | 1,200 |

## OUTLINE DIMENSIONS



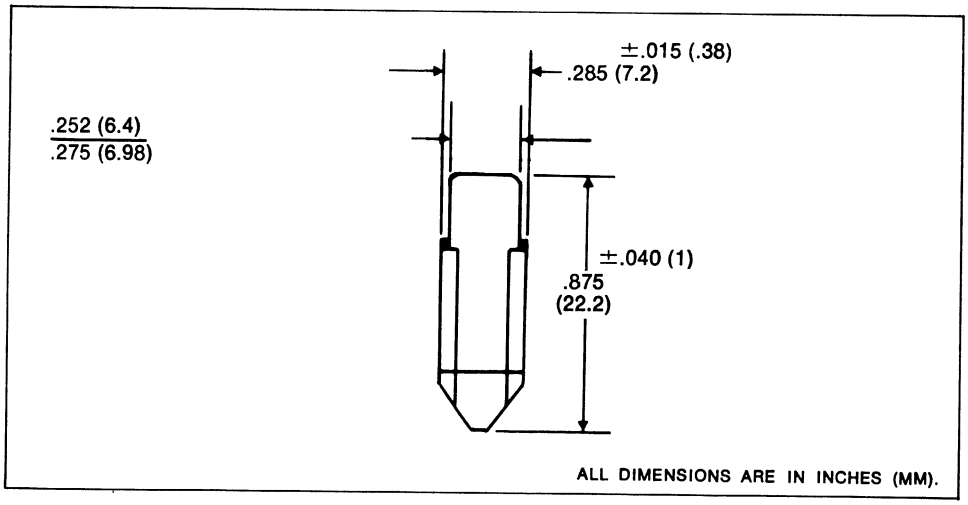

ALL DIMENSIONS ARE IN INCHES (MM).

# T-2 "INDICATOR" LAMPS

| LAMP NUMBER | DESIGN VOLTS | DESIGN AMPS | RATED AVERAGE LIFE (HRS.) | WATTAGE AT DESIGN VOLTS | AVERAGE END FOOT CANDLES |
|---|---|---|---|---|---|
| 4 ESB | 4 | .035-.045 | 10,000 | .2 | 200 |
| 5 ESB | 5 | .035-.045 | 8,000 | .2 | 225 |
| 51 B | 6 | .250 | 5,000 | 1.44 | 2,000 |
| 6 ESB | 6 | .035-.045 | 10,000 | .2 | 250 |
| 10 ASB | 10 | .009-.011 | 50,000 | .1 | * |
| 10 CSB | 10 | .015-.020 | 20,000 | .2 | 60 |
| 10 ESB | 10 | .035-.045 | 10,000 | .4 | 450 |
| 12 ESB | 12 | .035-.045 | 10,000 | .4 | 650 |
| 14 FSB | 14 | .080 | 500 | 1.12 | 4,000 |
| 16 CSB | 16 | .015-.020 | 15,000 | .3 | 80 |
| 16 ESB | 16 | .035-.045 | 7,500 | .6 | 800 |
| 18 ESB | 18 | .035-.045 | 5,000 | .7 | 850 |
| 24 CSB | 24 | .015-.020 | 15,000 | .4 | 100 |
| 24 ESB | 24 | .035-.045 | 8,000 | 1.0 | 850 |
| 28 ESB | 28 | .035-.045 | 6,000 | 1.1 | 1,500 |
| 48 ESB | 48 | .035-.045 | 5,000 | 1.9 | 3,000 |

* Cherry Red Glow

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

RELAMPABLE

# SERIES 2802 11/16" DIA.

**FEATURES**

**Ordering Information:** Complete assembly consists of socket plus lens plus "Pilot" lamp.

**Mounting:** Supplied with nylon hex nut

**Lamp:** "Pilot" type

**Lens:** Polycarbonate — threaded

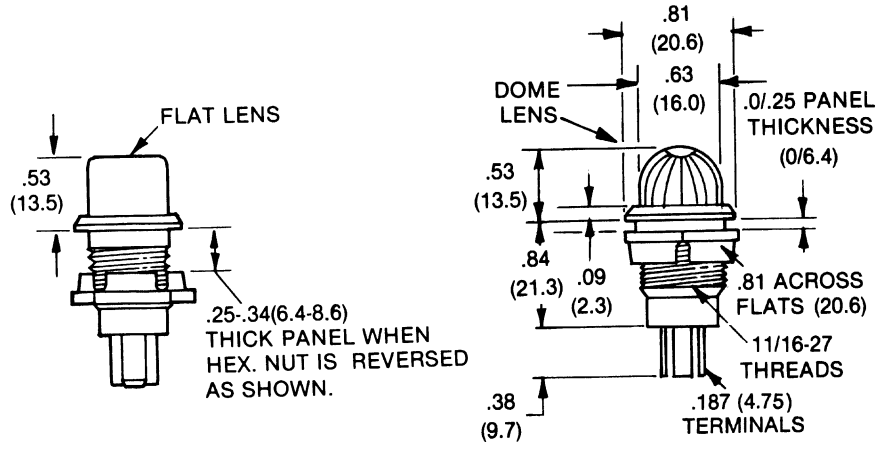
**Body:** Black polyester

**Terminals:** Nickel plated brass

**Bezel:** Black

| LENS COLOR | PART NO. | |
|---|---|---|
| | DOME | FLAT |
| Red | 2811 | 2851 |
| Clear | 2812 | 2852 |
| Amber | 2813 | 2853 |
| White | 2814 | 2854 |
| Green | 2815 | 2855 |
| Blue | 2816 | 2856 |
| Yellow | 2817 | 2857 |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2803 1 1/16" DIA.

**FEATURES**

**Ordering Information:** Complete assembly consists of socket plus lens plus "Pilot" lamp.

**Mounting:** Supplied with nylon hex nut

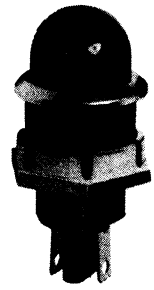
**Lamp:** "Pilot" type

**Lens:** Polycarbonate — threaded

**Body:** Black polyester

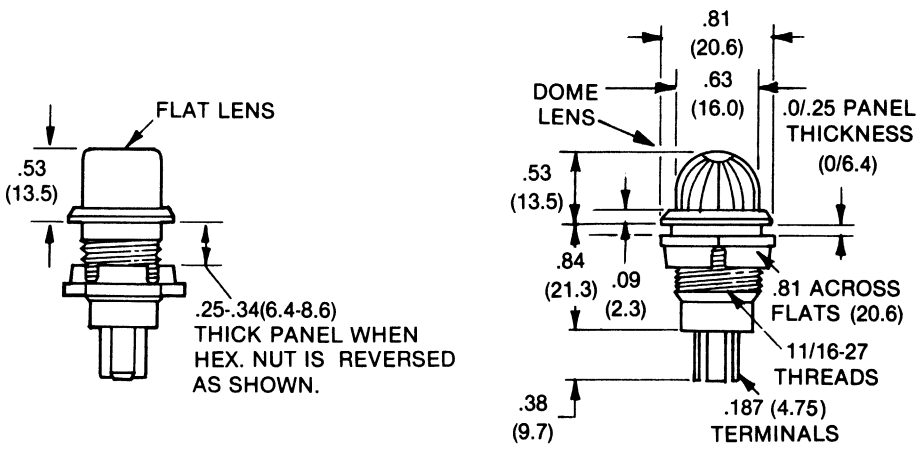
**Terminals:** Nickel plated brass

**Bezel:** Polished stainless steel



| LENS COLOR | PART NO | |
|---|---|---|
| | DOME | FLAT |
| Red | 2811 | 2851 |
| Clear | 2812 | 2852 |
| Amber | 2813 | 2853 |
| White | 2814 | 2854 |
| Green | 2815 | 2855 |
| Blue | 2816 | 2856 |
| Yellow | 2817 | 2857 |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 3040, 3043 ½" DIA.

**FEATURES**

**Ordering Information:** Complete assembly consists of socket plus lens plus "Indicator" lamp

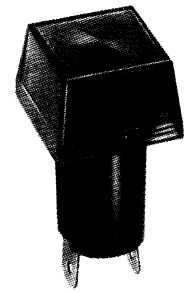
**Mounting:** .50 (12.7) dia. hole. Supplied with push-on speednut SN0461, (see page 170).

**Lamp:** "Indicator" type

**Lens:** Polycarbonate — snap-on

**Body:** Black nylon

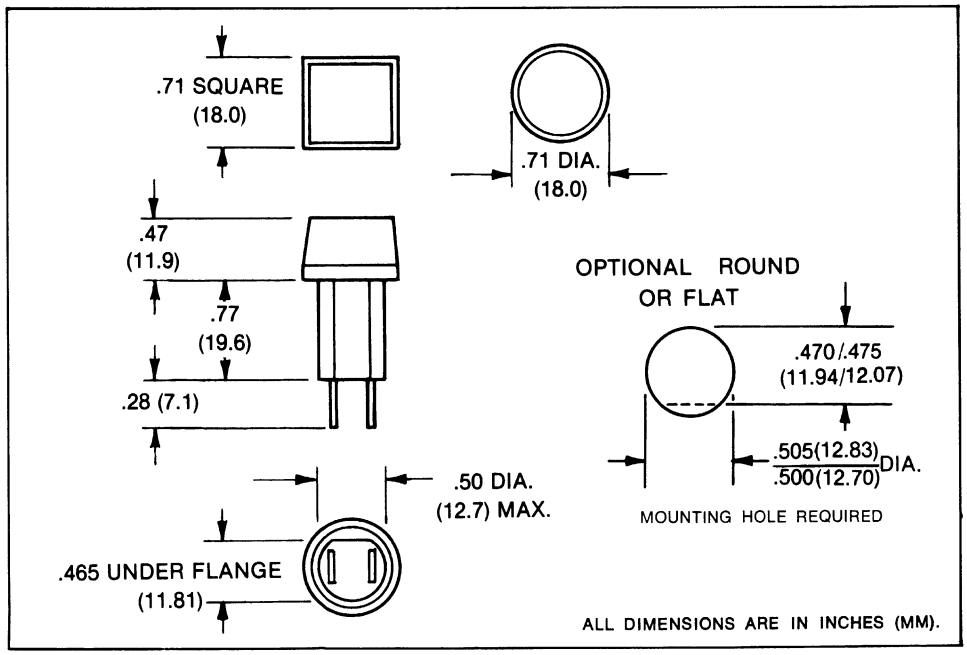
**Terminals:** Nickel plated brass



| ROUND LENS NO. | LENS COLOR | SQUARE LENS NO. |
|---|---|---|
| 3111 | Red | 3121 |
| 3112 | Clear | 3122 |
| 3113 | Amber | 3123 |
| 3114 | White | 3124 |
| 3115 | Green | 3125 |
| 3116 | Blue | 3126 |
| 3117 | Yellow | 3127 |

| SOCKET NO. | TERMINAL SIZE |
|---|---|
| 3040 | .205 (5.21) Wide |
| 3043 | .187 (4.75) Wide |

## OUTLINE DIMENSIONS



# SERIES 3062 ½" DIA.

**FEATURES**

**Ordering Information:** Complete assembly consists of socket plus lens plus "Pilot" lamp

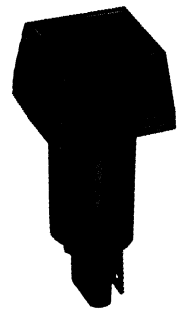
**Mounting:** .50 (12.7) dia. hole. Supplied with push-on speednut SN0461, (see page 170).

**Lamp:** "Pilot" type

**Lens:** Polycarbonate — snap-on

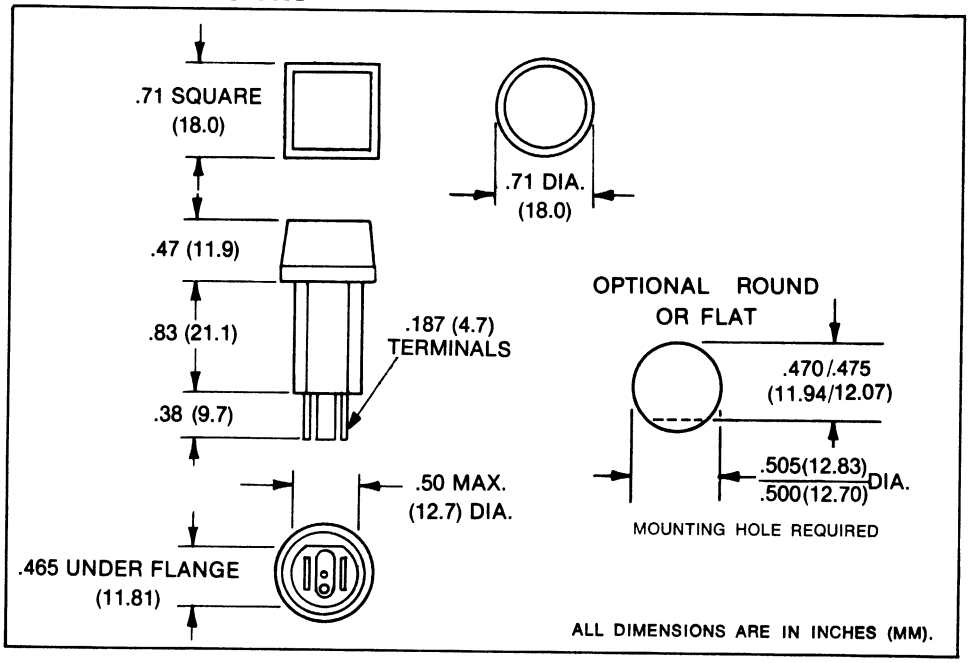
**Body:** Black Polyester

**Terminals:** Nickel plated brass



| ROUND LENS NO. | LENS COLOR | SQUARE LENS NO. |
|---|---|---|
| 3111 | Red | 3121 |
| 3112 | Clear | 3122 |
| 3113 | Amber | 3123 |
| 3114 | White | 3124 |
| 3115 | Green | 3125 |
| 3116 | Blue | 3126 |
| 3117 | Yellow | 3127 |

## OUTLINE DIMENSIONS



# SERIES 3130 ½" CENTERS

**FEATURES**

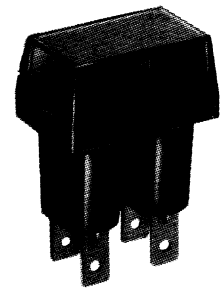
**Ordering Information:** Complete assembly consists of socket plus lens plus two "Indicator" lamps

**Mounting:** Supplied with two push-on speednuts SN1264, (see page 170).

**Lamp:** "Indicator" type

**Lens:** Polycarbonate — snap-on

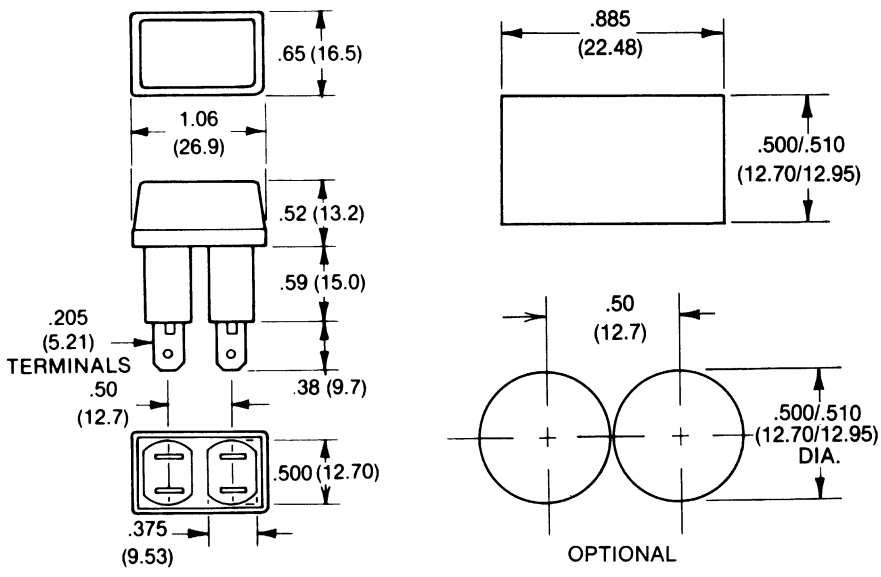
**Body:** Black polycarbonate



| LENS COLOR | LENS NO. |
|---|---|
| Red | 3141 |
| Clear | 3142 |
| Amber | 3143 |
| White | 3144 |
| Green | 3145 |
| Blue | 3146 |
| Yellow | 3147 |

| SOCKET NO. | DESCRIPTION |
|---|---|
| 3130 | individual contacts (4 contacts) |
| 3131 | one side common (3 contacts) |
| 3132 | both sides common (2 contacts) |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

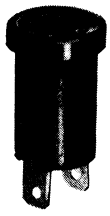
# ROUND SOCKETS ½" DIA. MODELS 3001, 3041

**FEATURES** •For use with "Indicator" Lamps

**Mounting:** .50 (12.7) dia. hole. Supplied with push-on speednut SN0461, (see page 170).

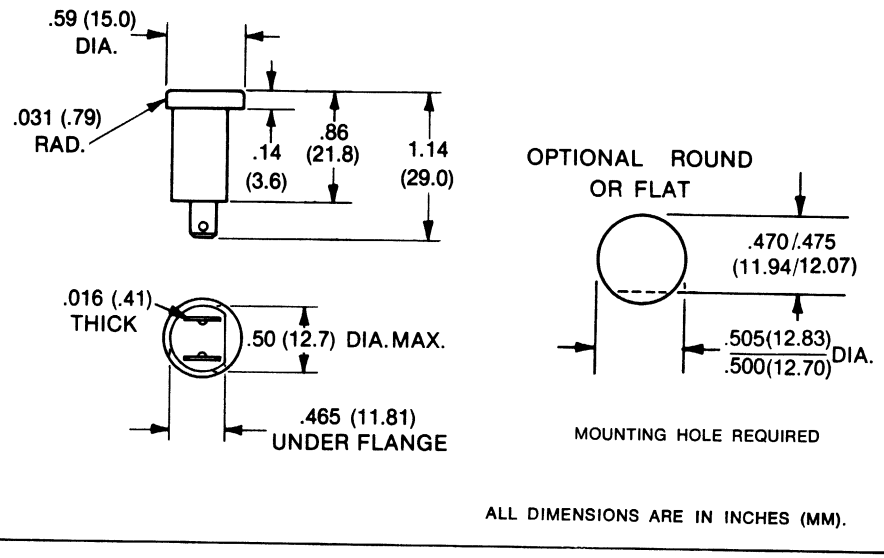
**Terminals:** Nickel plated brass

**Body:** Black nylon



| MODEL NO. | TERMINAL SIZE |
|---|---|
| 3001 | .205 (5.21) Wide |
| 3041 | .187 (4.75) Wide |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

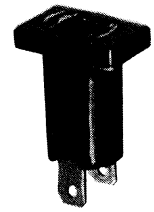
# RECTANGULAR SOCKETS ½" DIA. MODELS 3002, 3042

**FEATURES** • For use with "Indicator" Lamps

**Mounting:** .50 (12.7) dia. hole. Supplied with push-on speednut SN0461, (see page 170).

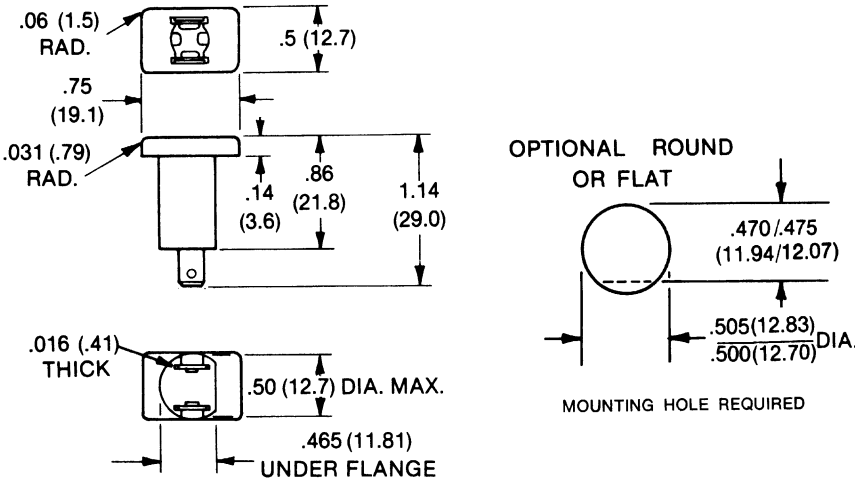
**Terminals:** Nickel plated brass

**Body:** Black nylon



| MODEL NO. | TERMINAL SIZE |
|---|---|
| 3002 | .205 (5.21) Wide |
| 3042 | .187 (4.75) Wide |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

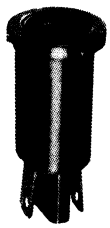
# ROUND SOCKETS ½" DIA. MODEL 3062

**FEATURES** • For use with "Pilot" Lamps

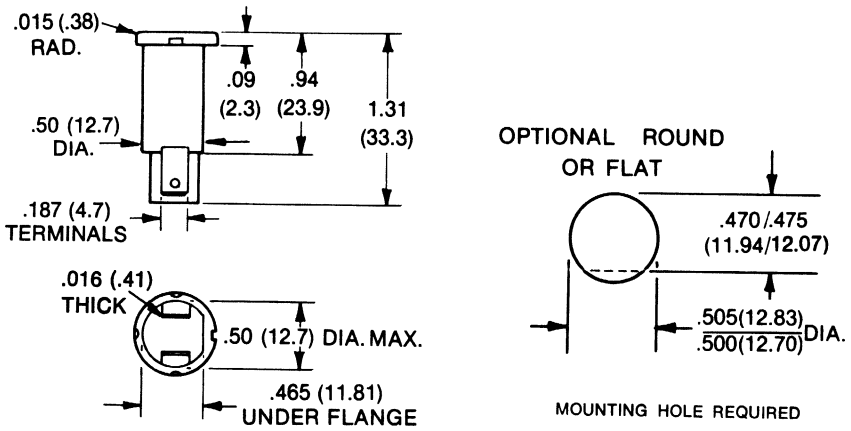
**Mounting:** .50 (12.7) dia. hole. Supplied with push-on speednut SN0461, (see page 170).

**Terminals:** Nickel plated brass

**Body:** Black polyester



## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# COLOR END CAPS SERIES 3011, 3021

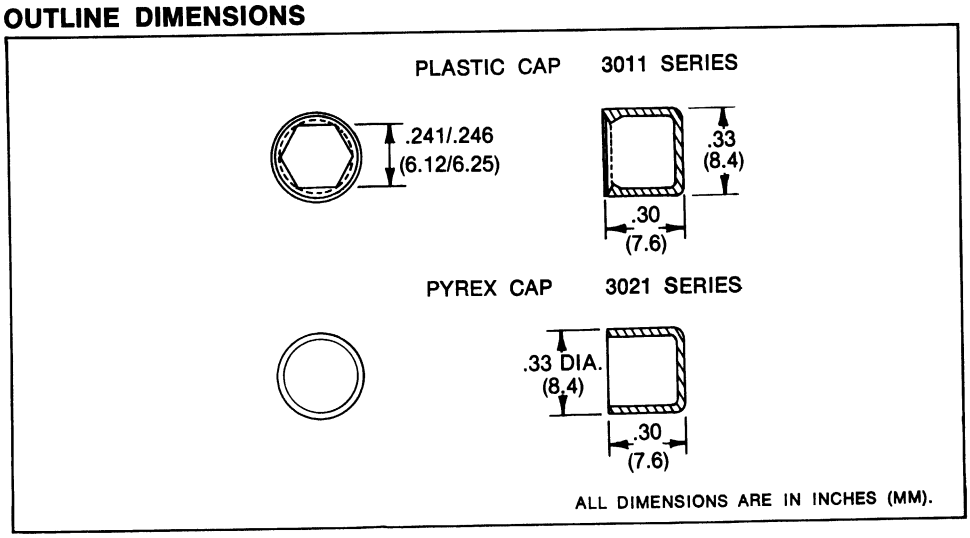
**FEATURES** •For use with either "Indicator" or "Pilot" lamps

Lamps fitted with high heat polypropylene or Pyrex caps permit full 180° visibility, true color light, and easy color identification when lamps are off. The polypropylene plastic caps are imprintable and incorporate retaining ribs. Polypropylene caps can be used with lamps rated below 1½ watts. Pyrex end caps are required with lamp ratings of 1½ watts or more. Pyrex caps must be cemented to lamps (use silicone adhesive).

**Ordering Information:** Caps may be ordered separately or permanently cemented to the lamps. Plastic color

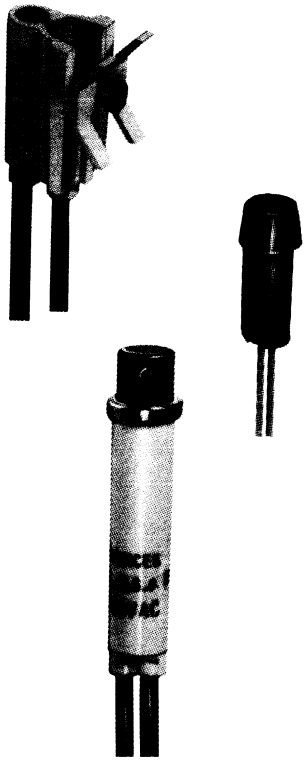
| COLOR | PLASTIC CAP | PYREX CAP |
|---|---|---|
| Red | 3011 | 3021 |
| Amber | 3013 | — |
| White | 3014 | 3024 |
| Green | 3015 | 3025 |
| Blue | 3016 | 3026 |
| Yellow | 3017 | 3027 |

## OUTLINE DIMENSIONS



# Non-Relampable

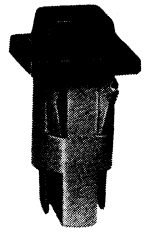
## INDICATOR LIGHTS

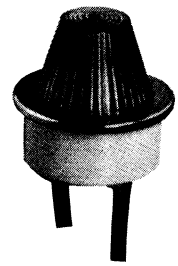


IDI non-relampable, or unit-construction, indicator light assemblies are compact and attractive. They are essentially tamper-proof and have outstanding reliability due to the elimination of sockets and spring contacts. In addition, IDI non-relampable indicator light assemblies are extremely economical to buy and install.

In many applications indicator light assemblies will outlast the products on which they are used. This is usually true for neon and solid-state indicator lights, but can also apply for incandescent indicators, depending on usage.

For line-voltage applications, IDI non-relampable neon indicator light assemblies are the preferred choice. In intermittent duty these rugged, extraordinarily reliable neon lamps will function in excess of 10,000 hours. All neon indicator lights in



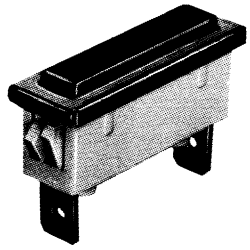


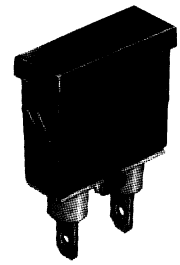
# NON-RELAMPABLE INTRODUCTION

this section incorporate a resistor to limit current to less than 2 mA in 115 or 230 volt service. Where longer-than-standard life is needed, such as standby power supplies or other products where the lamp will be on all of the time, life can be extended by adding extra resistance. Order-of-magnitude increases in life can be achieved with relatively modest decreases in light output.

For low-voltage application, IDI solid-state indicator light assemblies have indefinitely long rated life and offer excellent ruggedness and reliability, when properly used in the circuit (or rectifier diode protected). Solid-state indicator lights listed in this section incorporate both appropriate current-limiting resistors and rectifier diode protection.

For low-voltage applications where higher light output is required, where wider color assortment than is available with LEDs is needed, or where economy is paramount, IDI incandescent non-relampable assemblies should be considered. However, because incandescent lamps are affected by vibration, shock, and voltage transients, their lamp life ratings should not be construed as a guarantee of actual performance. Generally, the lower the voltage and higher the current the more rugged the lamp, so that 12 volt incandescent lights will usually outlast 28 volt incandescent lights, even if life ratings show the reverse. Of course, incandescent indicator lights can be used successfully and economically—IDI makes millions of non-relampable incandescent indicator light assemblies every year. We do recommend, however, that you test to be sure that the unit selected will be suitable for your application.





# GENERAL PURPOSE INDICATOR LIGHTS

**FEATURES**

- Neon models incorporate appropriate current-limiting resistors
- Solid-state models incorporate appropriate current-limiting resistors and protective rectifier diodes.
- A choice of wire leads or quick connect terminals
- Easy tamper-proof mounting
- UL Recognized — CSA Approved
- Rugged and long-lived, IDI NON-RELAMPABLE Indicator Lights usually outlast the product on which they are used. Conservatively rated, the neon lights will function in excess of 10,000 hours — and often much longer. Depending on usage, the incandescent models can also provide outstanding performance. Tamper-proof housing and elimination of sockets and spring contacts — along with intrinsically rugged shock-proof design — all combine to provide outstanding reliability.

IDI NON-RELAMPABLE Indicator Lights are compact and economical. They take little space on your panel or behind it and make modest demands on your budget.



## LAMP DATA TABLES

**Neon Lamps (All High-Brightness)**

| LAMP NO. | INCORPORATED RESISTANCE (Ohms) | | AVERAGE RATED LIFE (Hours) | |
|---|---|---|---|---|
| | 125VAC | 250V | 125VAC | 250V |
| C2A (NE-2H) | 30k | 100k | 25,000 | 25,000 |
| C6A | 18k | — | 10,000 | — |
| G2B (Green) | 39k | 120k | 25,000 | 25,000 |
| T2B (Blue) | 39k | 120k | 25,000 | 25,000 |

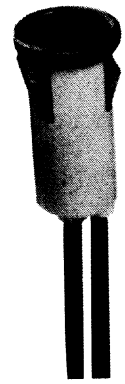
**Incandescent Lamps (T-1¾)**

| NOMINAL VOLTAGE | LAMP NO. | DESIGN VOLTAGE | DESIGN AMPS | MSCP (Approx.) | RATED LIFE (Hours)* |
|---|---|---|---|---|---|
| 6V | 2112 | 6.3 | .20 | .55 | 20,000 |
| 12V | 2162 | 14.0 | .10 | .50 | 10,000 |
| 28V | 2187 | 28.0 | .04 | .30 | 7,000 |

**Note:** To convert 125V models to 250V service, add a 47k series resistor for C6A lamps; add a 68k series resistor for C2A, G2B and T2B lamp.

* Incandescent lamp life ratings are based on static (vibration-free) conditions. Unit should be tested in your application to assure that it will perform satisfactorily.

# SERIES 1030D, 1090D ½" DIA.



**FEATURES**

**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/.100 (.51/2.54) thick. Push-on speednut SN0461, (see page 170) also available.

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (112/122.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

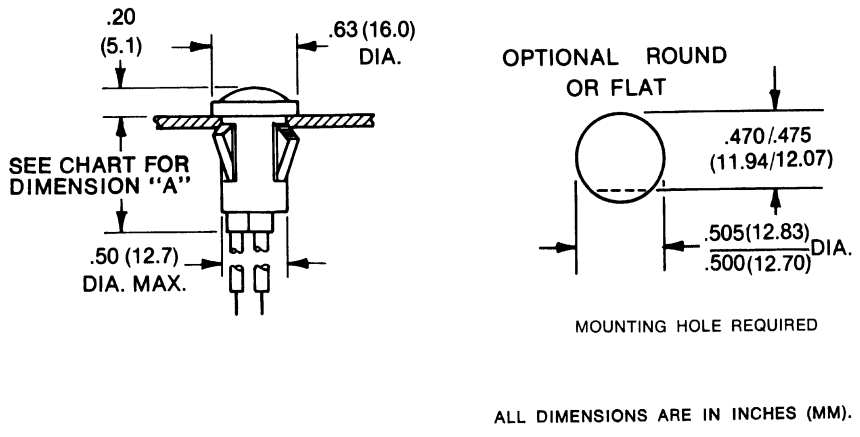
**Bezel:** Chrome plated brass

**Housing:** White nylon

| LENS COLOR | NEON | | INCANDESCENT | |
|---|---|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 208-250V | MODEL NO. 12V | MODEL NO. 28V |
| Red | 1030D1 | 1031D1 | 1090D1-12V | 1090D1-28V |
| Amber | 1030D3 | 1031D3 | 1090D3-12V | 1090D3-28V |
| White | 1030D4 | 1031D4 | 1090D4-12V | 1090D4-28V |
| Green | 1032D5* | 1033D5* | 1090D5-12V | 1090D5-28V |
| Lamp | C2A + Resistor | | #2162 | #2187 |
| Lead Color | Black | One Black/ One Red | Yellow | Purple |
| "A" | 1.13 (28.7) | 1.13 (28.7) | .91 (23.1) | .91 (23.1) |

* Incorporates G2B lamp and resistor
Underwriters Laboratories (UL) File No. E20325
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 1030QD ½" DIA.

**FEATURES**

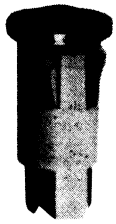
**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/ .100 (.51/2.54) thick. Push-on speednut SN0461, (see page 170) also available.

**Terminals:** Tinned brass

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

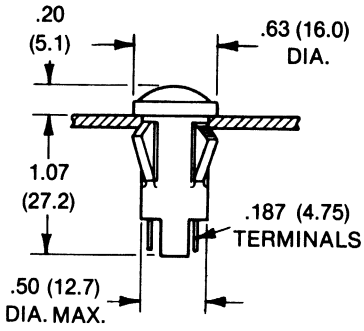
**Housing:** White nylon

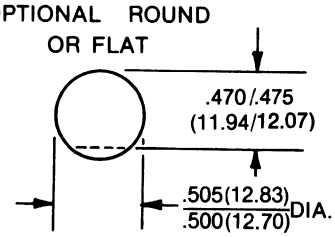


| LENS COLOR | NEON | |
|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 208-250V |
| Red<br>Amber<br>White<br>Green | 1030QD1<br>1030QD3<br>1030QD4<br>1032QD5* | 1031QD1<br>1031QD3<br>1031QD4<br>1033QD5* |
| Lamp | C2A + Resistor | |
| | Quick Connect Terminals | |
| | — | — |

* Incorporates G2B lamp and resistor
Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




MOUNTING HOLE REQUIRED

ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 1050A, 1090A ½" DIA.

**FEATURES**

**Mounting:** Wil snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/.100 (.51/2.54) thick. Push-on speednut SN0461, (see page 170) also available.

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Nylon on models 1050A1, 1050A3, 1050A4 — Polycarbonate on all other models

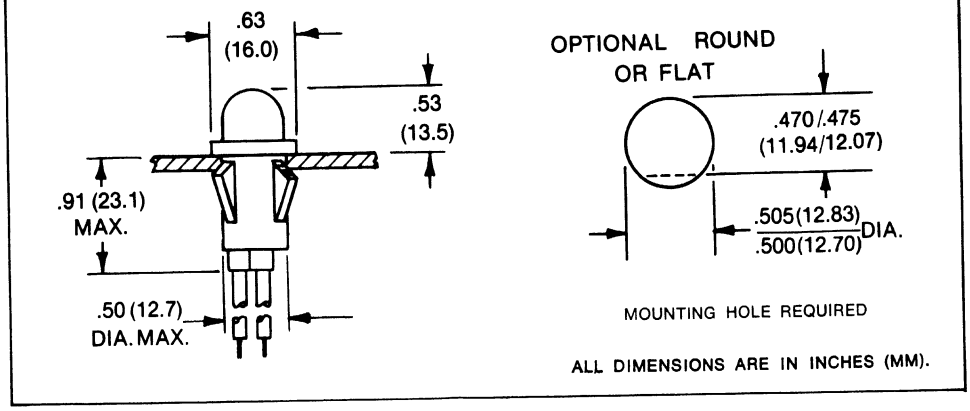
**Bezel:** Chrome plated brass

**Housing:** White nylon

| LENS COLOR | NEON | | INCANDESCENT | |
|---|---|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 208-250V | MODEL NO. 12V | MODEL NO. 28V |
| Red | 1050A1 | 1051A1 | 1090A1-12V | 1090A1-28V |
| Clear | 1050A2 | 1051A2 | — | — |
| Amber | 1050A3 | 1051A3 | 1090A3-12V | 1090A3-28V |
| White | 1050A4 | 1051A4 | 1090A4-12V | 1090A4-28V |
| Green | 1052A5* | 1053A5* | 1090A5-12V | 1090A5-28V |
| Blue | 1052A6† | 1053A6† | 1090A6-12V | 1090A6-28V |
| Lamp | C2A + Resistor | | #2162 | #2187 |
| Lead Color | Black | One Black One Red | Yellow | Purple |

* Incorporates G2B lamp and resistor
† Incorporates T2B lamp and resistor
Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS



# SERIES 1050QA ½" DIA.

**FEATURES**

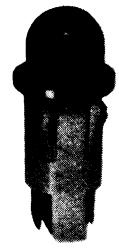
**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/.100 (.51/2.54) thick. Push-on speed-nut SN0461, (see pg.170) also available.

**Terminals:** Tinned brass

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

**Housing:** White nylon

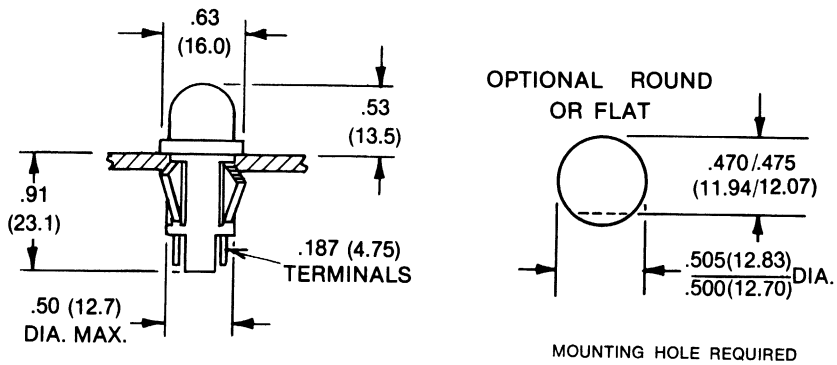


| LENS COLOR | NEON | |
|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 208-250V |
| Red | 1050QA1 | 1051QA1 |
| Clear | 1050QA2 | — |
| Amber | 1050QA3 | 1051QA3 |
| White | 1050QA4 | 1051QA4 |
| Green | 1052QA5* | 1053QA5* |
| Blue | 1052QA6† | 1053QA6† |
| Lamp | C2A + Resistor | |
| | Quick Connect Terminals | |

* Incorporates G2B lamp and resistor
† Incorporates T2B lamp and resistor

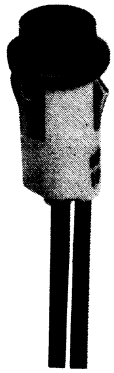
Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 1050C, 1090C ½" DIA.



**FEATURES**

**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/.100 (.51/2.54) thick. Push-on speed-nut SN0461, (see pg. 170) also available.

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

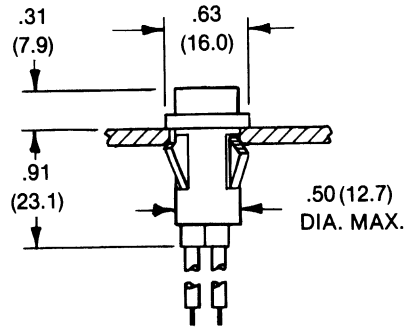
**Housing:** White nylon

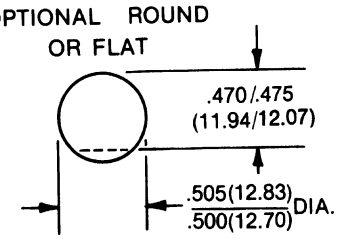
| LENS COLOR | NEON | | INCANDESCENT | |
|---|---|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 208-250V | MODEL NO. 12V | MODEL NO. 28V |
| Red | 1050C1 | 1051C1 | 1090C1-12V | 1090C1-28V |
| Clear | 1050C2 | 1051C2 | — | — |
| Amber | 1050C3 | 1051C3 | 1090C3-12V | 1090C3-28V |
| White | 1050C4 | 1051C4 | 1090C4-12V | 1090C4-28V |
| Green | 1052C5* | 1053C5* | 1090C5-12V | 1090C5-28V |
| Lamp | C2A + Resistor | | #2162 | #2187 |
| Lead Color | Black | One Black One Red | Yellow | Purple |

* Incorporates G2B lamp and resistor

Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




MOUNTING HOLE REQUIRED

ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 1050QC ½" DIA.

**FEATURES**

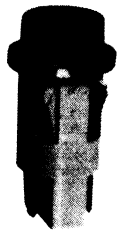
**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/.100 (.51/2.54) thick. Push-on speednut SN0461) (see pg. 170) also available.

**Terminals:** Tinned brass

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

**Housing:** White nylon

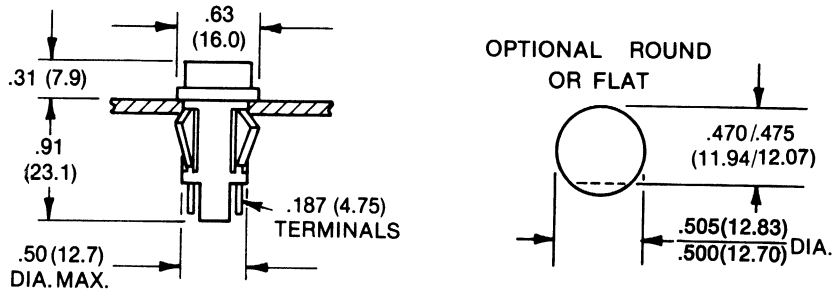


| LENS COLOR | NEON | |
|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 208-250V |
| Red | 1050QC1 | 1051QC1 |
| Clear | 1050QC2 | — |
| Amber | 1050QC3 | 1051QC3 |
| White | 1050QC4 | 1051QC4 |
| Green | 1052QC5* | 1053QC5* |
| Lamp | C2A + Resistor | |
| Quick Connect Terminals | | |

* Incorporates G2B lamp and resistor

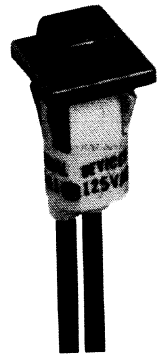
Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 1050N, 1090N ½" DIA.



**FEATURES**

**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/.100 (.51/2.54) thick. Push-on speednut SN0461) (see pg. 170) also available.

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

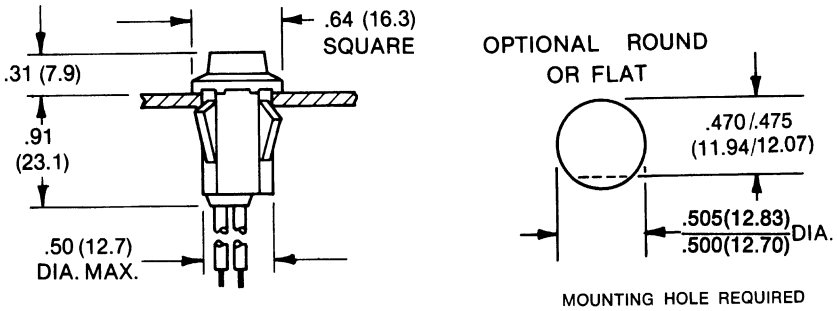
**Bezel:** Chrome plated brass

**Housing:** White nylon

| LENS COLOR | NEON | INCANDESCENT | |
|---|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 12V | MODEL NO. 28V |
| Red | 1050N1 | 1090N1-12V | 1090N1-28V |
| Clear | 1050N2 | — | — |
| Amber | 1050N3 | 1090N3-12V | 1090N3-28V |
| White | 1050N4 | 1090N4-12V | 1090N4-28V |
| Green | 1052N5* | 1090N5-12V | 1090N5-28V |
| Lamp | C2A + Resistor | #2162 | #2187 |
| Lead Color | Black | Yellow | Purple |

* Incorporates G2B lamp and resistor
Underwriters Laboratories (UL) File No. E20325
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 1050QN ½" DIA.

**FEATURES**

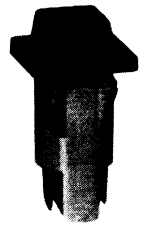
**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/ .100 (.51/2.54) thick. Push-on speednut SN0461) (see pg. 170) also available.

**Termials:** Tinned brass

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

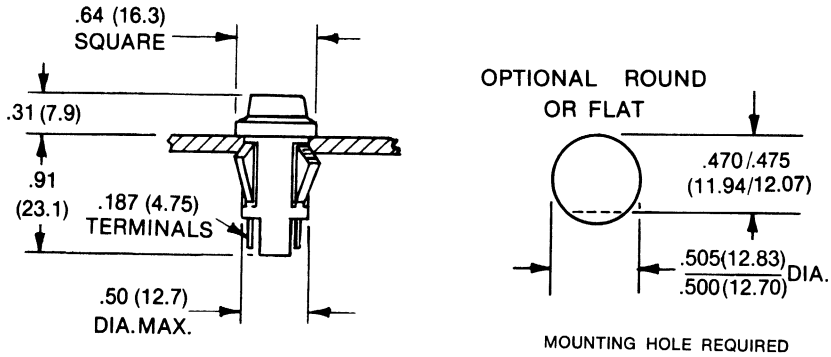
**Housing:** White nylon



| LENS COLOR | NEON |
|---|---|
| | MODEL NO. 105-125VAC |
| Red | 1050QN1 |
| Clear | — |
| Amber | 1050QN3 |
| White | 1050QN4 |
| Green | 1052QN5* |
| Lamp | C2A + Resistor |
| | Quick Connect Terminals |

* Incorporates G2B lamp and resistor
Underwriters Laboratories (UL) File No. E20325
Canadian Standards Association (CSA) File No. 13346

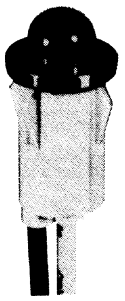
## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 1091M ½" DIA.

**FEATURES** Solid-State Indicator Lights Complete With Built-in Current-Limiting Resistor and Rectifier Diode



**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/.100 (.51/2.54) thick. Push-on speednut SN0461 (see catalog page 170) also available.

**Wire Leads:** No. 22 AWG (105°C) lead color: red and white 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

**Anode (+):** Red lead

**Bezel:** Chrome plated brass

**Housing:** White nylon

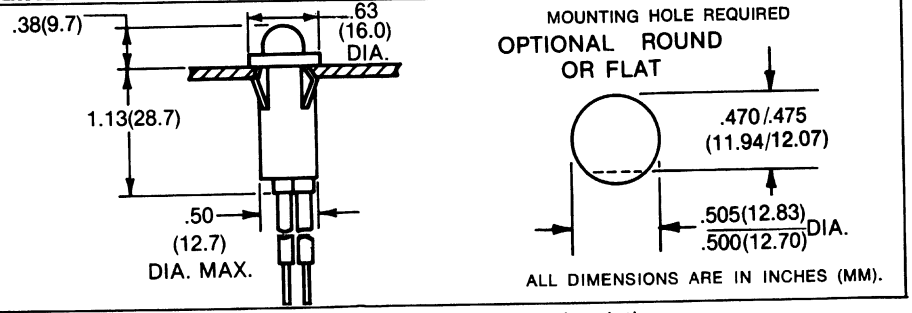
| SOLID STATE | | | | |
|---|---|---|---|---|
| LENS COLOR | MODEL NO. 6V | MODEL NO. 12V | MODEL NO. 24V | INCORPORATES LED |
| Red<br>Green<br>Yellow | 1091M1-6V<br>1091M5-6V<br>1091M7-6V | 1091M1-12V<br>1091M5-12V<br>1091M7-12V | 1091M1-24V<br>1091M5-24V<br>1091M7-24V | 4304H1<br>4304H5<br>4304H7 |
| Internal Resistor (ohms) | 150 | 390 | 1000 | — |

Note: Also incorporates 1N4004 (400 P.I.V.) rectifier diode.

| VOLTAGE TABLE | | |
|---|---|---|
| NOMINAL | VAC | VDC |
| 6V | 5 to 11 | 3.5 to 6.5 |
| 12V | 10 to 20 | 6 to 13.5 |
| 24V | 22 to 32 | 12 to 24 |

To use 24V model: Beyond 32VAC add 30 ohms per volt; beyond 24VDC add 50 ohms per volt. Use ½W resistor up to 50V; 1W resistor for 50V to 70V; 2W resistor for 75V to 125V. Do not use beyond 125V.

## OUTLINE DIMENSIONS

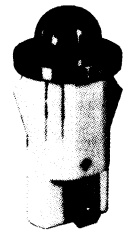



Alternate LEDs are also available in this package as standard variations.

Industrial Devices, Inc., Edgewater, NJ 07020 • (201) 224-4700 Telex: 127459 Fax: 201 224 9095

# SERIES 1091QM ½" DIA.

**FEATURES** Solid-State Indicator Lights Complete With Built-in Current-Limiting Resistor and Rectiifer Diode



**Mounting:** Will snap-fit into .500/.505 (12.70/12.83) dia. hole in panels .020/ .100 (.51/2.54) thick. Push-on speednut SN0461 (see catalog page 170) also available.

**Terminals:** Quick connect, tinned brass

**Lens:** Polycarbonate

**Anode (+):** Red lead

**Bezel:** Chrome plated brass

**Housing:** White nylon

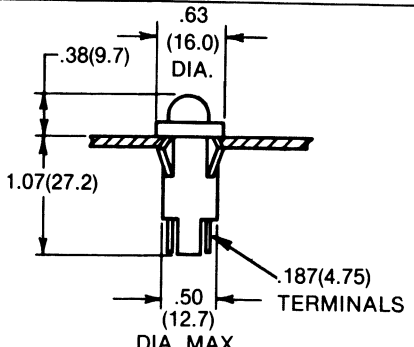
| SOLID STATE | | | |
|---|---|---|---|
| LENS COLOR | MODEL NO. 12V | MODEL NO. 24V | INCORPORATES LED |
| Red<br>Green<br>Yellow | 1091QM1-12V<br>1091QM5-12V<br>1091QM7-12V | 1091QM1-24V<br>1091QM5-24V<br>1091QM7-24V | 4304H1<br>4304H5<br>4304H7 |
| Internal Resistor (ohms) | 390 | 1000 | — |

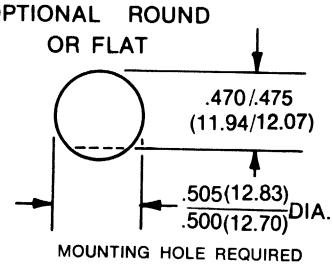
Note: Also incorporates 1N4004 (400 P.I.V.) rectifier diode.

| VOLTAGE TABLE | | |
|---|---|---|
| NOMINAL | VAC | VDC |
| 6V<br>12V<br>24V | 5 to 11<br>10 to 20<br>22 to 32 | 3.5 to 6.5<br>6 to 13.5<br>12 to 24 |

To use 24V model: Beyond 32VAC add 30 ohms per volt; beyond 24VDC add 50 ohms per volt. Use ½W resistor up to 50V; 1W resistor for 50V to 70V; 2W resistor for 75V to 125V. Do not use beyond 125V.

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# SERIES 2110A, 2195A 5/16" DIA.

2110A, 2195A

**FEATURES**

**Mounting Hole:** .31 (7.9) min. dia. Supplied with push-on speednut SN1287 (see page 170)

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (112/122.9) long, stripped .43/.57 (10.9/14.5)

**Terminals:** Tinned brass

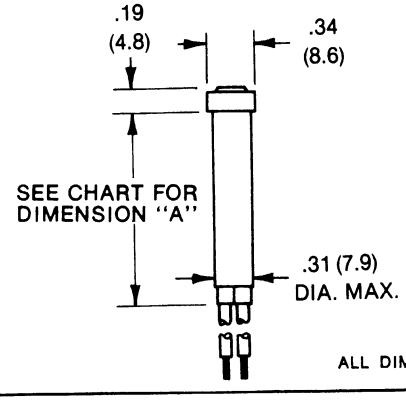
**Lens:** Polycarbonate

**Housing:** White nylon

| LENS COLOR | NEON | INCANDESCENT | | NEON |
|---|---|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 12V | MODEL NO. 28V | MODEL NO. 105-125VAC |
| Red | 2110A1 | 2195A1-12V | 2195A1-28V | 2110QA1 |
| Clear | 2110A2 | — | — | 2110QA2 |
| Amber | 2110A3 | 2195A3-12V | 2195A3-28V | 2110QA3 |
| White | 2110A4 | 2195A4-12V | 2195A4-28V | 2110QA4 |
| Green | 2112A5* | 2195A5-12V | 2195A5-28V | 2112QA5* |
| Blue | 2112A6† | — | — | — |
| Lamp | C2A + Resistor | #2162 | #2187 | C2A + Resistor |
| Lead Color | Black | Yellow | Purple | Quick Connect Terminals |
| "A" | 1.48 (37.6) | .74 (18.8) | .74 (18.8) | — |

* Incorporates G2B lamp and resistor
† Incorporates T2B lamp and resistor
Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2110QA 5/16" DIA.

2110QA

**FEATURES**

**Mounting Hole:** .31 (7.9) min. dia. Supplied with push-on speednut SN1287 (see page 170)

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (112/122.9) long, stripped .43/.57 (10.9/14.5)

**Terminals:** Tinned brass

**Lens:** Polycarbonate

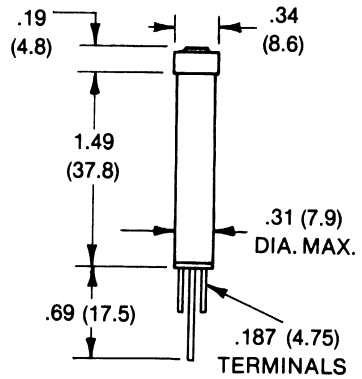
**Housing:** White nylon

| NEON | |
|---|---|
| LENS COLOR | MODEL NO. 105-125VAC |
| Red | 2110QA1 |
| Clear | 2110QA2 |
| Amber | 2110QA3 |
| White | 2110QA4 |
| Green | 2112QA5* |
| Blue | — |
| Lamp | C2A + Resistor |
| Lead Color | Quick Connect Terminals |
| "A" | — |

* Incorporates G2B lamp and resistor

Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2120A 5/16" DIA.

**FEATURES**

**Mounting Hole:** .31 (7.87) min. dia. Supplied with push-on speednut SN1287 (see page 170)

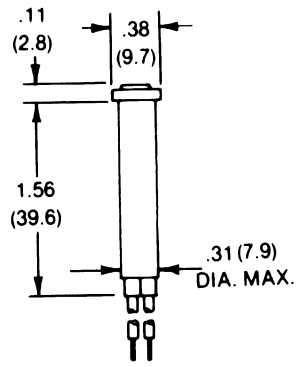
**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (112/122.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

**Housing:** White nylon

| LENS COLOR | NEON |
|---|---|
| | MODEL NO. 105-125VAC |
| Red<br>Amber<br>White | 2120A1<br>2120A3<br>2120A4 |
| Lamp | C2A + Resistor |

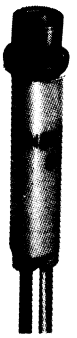
## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

# SERIES 2150A, 2194A 5/16" DIA.



**FEATURES**

**Mounting Hole:** .31 (7.9) min. dia. Supplied with push-on speednut SN1287 (see page 170)

**Wire Leads:** No. 22 AWG (105°C) 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Terminals:** Tinned brass

**Lens:** Polycarbonte

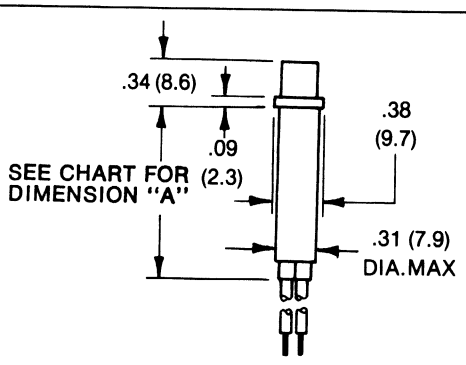
**Bezel:** Chrome plated brass

**Housing:** White nylon

| LENS COLOR | NEON | INCANDESCENT | |
|---|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 12V | MODEL NO. 28V |
| Red | 2150A1 | 2194A1-12V | 2194A1-28V |
| Clear | 2150A2 | — | — |
| Amber | 2150A3 | 2194A3-12V | 2194A3-28V |
| White | 2150A4 | 2194A4-12V | 2194A4-28V |
| Green | 2152A5* | 2194A5-12V | 2194A5-28V |
| Blue | 2152A6† | | |
| Lamp | C2A + Resistor | #2162 | #2187 |
| Lead Color | Black | Yellow | Purple |
| "A" | 1.31 (33.3) | .83 (21.1) | .83 (21.1) |

* Incorporates G2B lamp and resistor
† Incorporates T2B lamp and resistor
Underwriters Laboratories (UL) File No. E20325
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2150QA 5/16" DIA.

**FEATURES**

**Mounting Hole:** .31 (7.9) min. dia. Supplied with push-on speednut SN1287 (see page 170)

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Terminals:** Tinned brass

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

**Housing:** White nylon

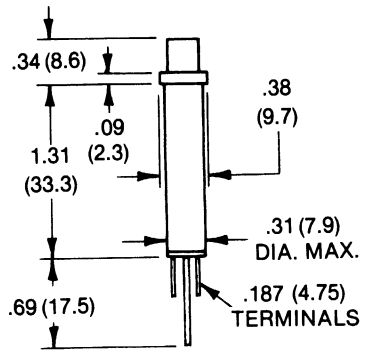
| LENS COLOR | NEON MODEL NO. 105-125VAC |
|---|---|
| Red | 2150QA1 |
| Clear | — |
| Amber | 2150QA3 |
| White | 2150QA4 |
| Green | 2152QA5* |
| Lamp | C2A + Resistor |
| Lead Color | Quick Connect Terminals |
| "A" | — |

* Incorporates G2B lamp and resistor

Underwriters Laboratories (UL) File No. E20325

Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2191L 5/16" DIA.

**FEATURES** Solid-State Indicator Lights Complete With Built-in Current-Limiting Resistor and Rectifier Diode.

**Mounting Hole:** .31 (7.9) min. dia. Supplied with push-on speednut SN1287 (see page 170)

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 Anode (10.9/14.5)

**Anode (+):** Red lead

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

**Housing:** White nylon

| LENS COLOR | SOLID STATE | | |
|---|---|---|---|
| | MODEL NO. 6V | MODEL NO. 12V | MODEL NO. 24V |
| Red<br>Green<br>Yellow | 2191L1-6V<br>2191L5-6V<br>2191L7-6V | 2191L1-12V<br>2191L5-12V<br>2191L7-12V | 2191L1-24V<br>2191L5-24V<br>2191L7-24V |
| Internal Resistor (ohms) | 150 | 390 | 1000 |

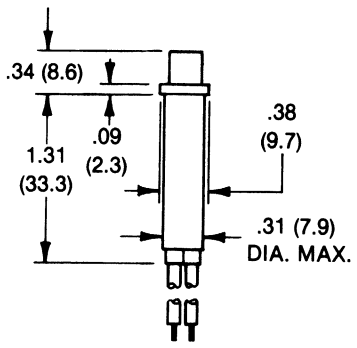
| LENS COLOR | INCORPORATES LED* |
|---|---|
| Red | 4304H1 |
| Green | 4304H5 |
| Yellow | 4304H7 |

* Also incorporates 1N4004 (400 P.I.V.) rectifier diode.

| VOLTAGE TABLE | | |
|---|---|---|
| NOMINAL | VAC | VDC |
| 6V | 5 to 11 | 3.5 to 6.5 |
| 12V | 10 to 20 | 6 to 13.5 |
| 24V | 22 to 32 | 12 to 24 |

To use 24V model:
Beyond 32VAC add 30 ohms per volt.
Beyond 24VDC add 50 ohms per volt.
Use ½W resistor up to 50V, 1W resistor for 50V to 70V, 2W resistor for 75V to 125V.
Do not use beyond 125V.

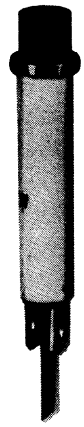
## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# SERIES 2191QL 5/16" DIA.



**FEATURES** Solid-State Indicator Lights Complete With Built-in Current-Limiting Resistor and Rectifier Diode.

**Mounting Hole:** .31 (7.9) min. dia. Supplied with push-on speednut SN1287 (see page 170)

**Terminals:** Quick connect, tinned brass

**Anode (+):** Red lead

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

**Housing:** White nylon

| LENS COLOR | SOLID STATE | | |
|---|---|---|---|
| | MODEL NO. 6V | MODEL NO. 12V | MODEL NO. 24V |
| Red | — | 2191QU1-12V | 2191QU1-24V |
| Green | — | 2191QU5-12V | 2191QU5-24V |
| Yellow | — | 2191QU7-12V | 2191QU7-24V |
| Internal Resistor (ohms) | 150 | 390 | 1000 |

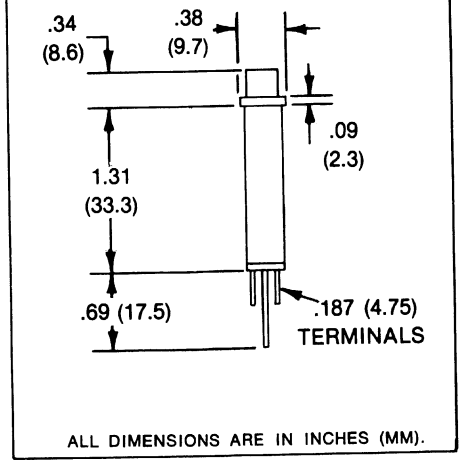
| LENS COLOR | INCORPORATES LED* |
|---|---|
| Red | 4304H1 |
| Green | 4304H5 |
| Yellow | 4304H7 |

* Also incorporates 1N4004 (400 P.I.V.) rectifier diode.

| VOLTAGE TABLE | | |
|---|---|---|
| NOMINAL | VAC | VDC |
| 6V | 5 to 11 | 3.5 to 6.5 |
| 12V | 10 to 20 | 6 to 13.5 |
| 24V | 22 to 32 | 12 to 24 |

To use 24V model:
Beyond 32VAC add 30 ohms per volt.
Beyond 24VDC add 50 ohms per volt.
Use ½W resistor up to 50V, 1W resistor for 50V to 70V, 2W resistor for 75V to 125V.
Do not use beyond 125V.

## OUTLINE DIMENSIONS




Alternate LEDs are also available in this package as standard variations.

# SERIES 2191U 5/16" DIA.

**FEATURES** Solid-State Indicator Lights Complete With Built-in Current-Limiting Resistor and Rectifier Diode.

**Mounting Hole:** .31 (7.9) min. dia. Supplied with push-on speednut SN1287 (see page 170)

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 Anode (10.9/14.5)

**Anode (+):** Red lead

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

**Housing:** White nylon

| LENS COLOR | SOLID STATE | | |
|---|---|---|---|
| | MODEL NO. 6V | MODEL NO. 12V | MODEL NO. 24V |
| Red<br>Green<br>Yellow | 2191U1-6V<br>2191U5-6V<br>2191U7-6V | 2191U1-12V<br>2191U5-12V<br>2191U7-12V | 2191U1-24V<br>2191U5-24V<br>2191U7-24V |
| Internal Resistor (ohms) | 150 | 390 | 1000 |

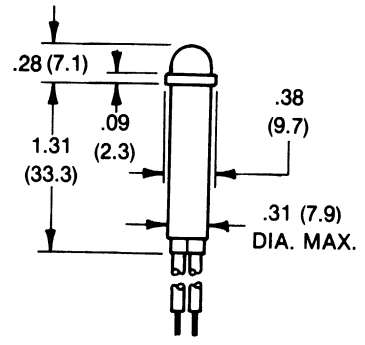
| LENS COLOR | INCORPORATES LED* |
|---|---|
| Red | 4304H1 |
| Green | 4304H5 |
| Yellow | 4304H7 |

* Also incorporates 1N4004 (400 P.I.V.) rectifier diode.

| VOLTAGE TABLE | | |
|---|---|---|
| NOMINAL | VAC | VDC |
| 6V | 5 to 11 | 3.5 to 6.5 |
| 12V | 10 to 20 | 6 to 13.5 |
| 24V | 22 to 32 | 12 to 24 |

To use 24V model:
Beyond 32VAC add 30 ohms per volt.
Beyond 24VDC add 50 ohms per volt.
Use ½W resistor up to 50V, 1W resistor for 50V to 70V, 2W resistor for 75V to 125V.
Do not use beyond 125V.

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# SERIES 2191QU 5/16" DIA.

**FEATURES** Solid-State Indicator Lights Complete With Built-in Current-Limiting Resistor and Rectifier Diode.

**Mounting Hole:** .31 (7.9) min. dia. Supplied with push-on speednut SN1287 (see page 170)

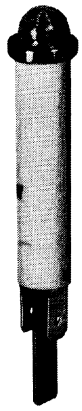
**Terminals:** Quick connect, tinned brass

**Anode (+):** Red lead

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

**Housing:** White nylon



| LENS COLOR | SOLID STATE | | |
|---|---|---|---|
| | MODEL NO. 6V | MODEL NO. 12V | MODEL NO. 24V |
| Red | — | 2191QL1-12V | 2191QL1-24V |
| Green | — | 2191QL5-12V | 2191QL5-24V |
| Yellow | — | 2191QL7-12V | 2191QL7-24V |
| Internal Resistor (ohms) | 150 | 390 | 1000 |

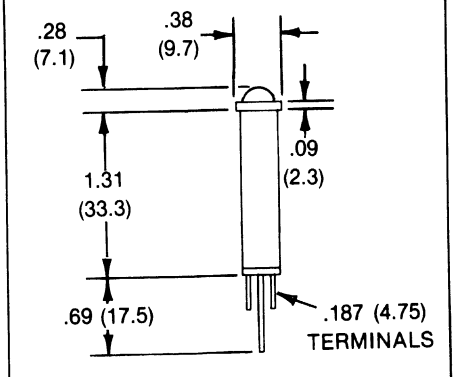
| LENS COLOR | INCORPORATES LED* |
|---|---|
| Red | 4304H1 |
| Green | 4304H5 |
| Yellow | 4304H7 |

* Also incorporates 1N4004 (400 P.I.V.) rectifier diode.

| VOLTAGE TABLE | | |
|---|---|---|
| NOMINAL | VAC | VDC |
| 6V | 5 to 11 | 3.5 to 6.5 |
| 12V | 10 to 20 | 6 to 13.5 |
| 24V | 22 to 32 | 12 to 24 |

To use 24V model:
Beyond 32VAC add 30 ohms per volt.
Beyond 24VDC add 50 ohms per volt.
Use ½W resistor up to 50V, 1W resistor for 50V to 70V, 2W resistor for 75V to 125V.
Do not use beyond 125V.

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Alternate LEDs are also available in this package as standard variations.

# SERIES 2990D 5/16" DIA.

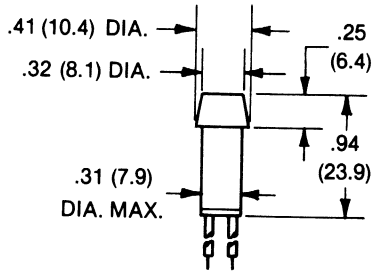
**FEATURES** **Mounting Hole:** .31 (7.9) min.

**Wire Leads:** No. 24 AWG 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

| INCANDESCENT | | | |
|---|---|---|---|
| LENS COLOR | MODEL NO. 6V | MODEL NO. 12V | MODEL NO. 28V |
| Red | 2990D1-6V | 2990D1-12V | 2990D1-28V |
| Amber | 2990D3-6V | 2990D3-12V | 2990D3-28V |
| White | 2990D4-6V | 2990D4-12V | 2990D4-28V |
| Green | 2990D5-6V | 2990D5-12V | 2990D5-28V |
| Blue | 2990D6-6V | 2990D6-12V | 2990D6-28V |
| Lamp | #2112 | #2162 | #2187 |
| Lead Color | White | Yellow | Purple |
| Mounting | Supplied with push-on speednut SN1287 (see page 170) | | |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2990P ½" DIA.

**FEATURES** **Mounting Hole:** .50 (12.7) min. dia.

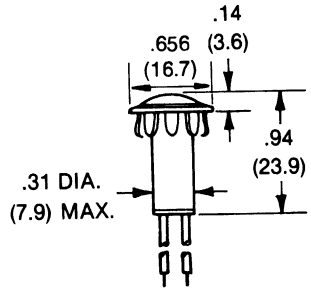
**Wire Leads:** No. 24 AWG 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

**Bezel:** Mirror finish chrome plated steel

| INCANDESCENT | | |
|---|---|---|
| LENS COLOR | MODEL NO. 12V | MODEL NO. 28V |
| Red | 2990P1-12V | 2990P1-28V |
| Amber | 2990P3-12V | 2990P3-28V |
| White | 2990P4-12V | 2990P4-28V |
| Green | 2990P5-12V | 2990P5-28V |
| Blue | 2990P6-12V | 2990P6-28V |
| Lamp | #2162 | #2187 |
| Lead Color | Yellow | Purple |
| Mounting | Plug-button bezel (see page 163) | |

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

Underwriters Laboratories (UL) File No. E20325
Canadian Standards Association (CSA) File No. 13346

# SERIES 2330D, 1 9/32" x 13/32"

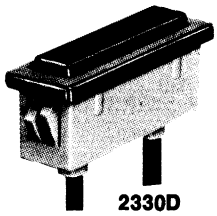
**FEATURES**

**Mounting:** Will snapfit into .032/.100 (.81/.254) thick panel, use speednut for other panel thicknesses. Available with speednut SN1963 (see page 170).

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass



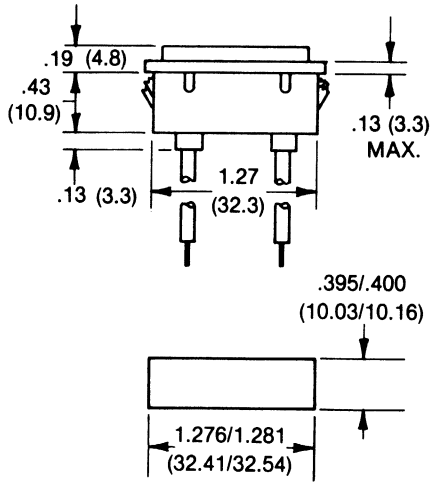
2330D

| LENS COLOR | NEON<br>MODEL NO. 105-125VAC<br>WIRE LEADS |
|---|---|
| Red | 2330D1 |
| Amber | 2330D3 |
| White | 2330D4 |
| Green | 2332D5* |
| Lamp | C6A + Resistor |

* Incorporates G2B lamp and resistor.

Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




MOUNTING HOLE REQUIRED

ALL DIMENSIONS ARE IN INCHES (MM).

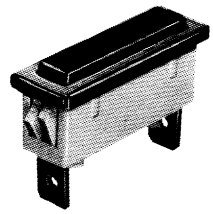
# SERIES 2330QD, 2390QD 1$^{9}/_{32}$" x $^{13}/_{32}$"

**FEATURES** **Mounting:** Will snapfit into .032/.100 (.81/.254) thick panel, use speednut for other panel thicknesses. Available with speednut SN1963 (see page 170).

**Terminals:** Tinned brass

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

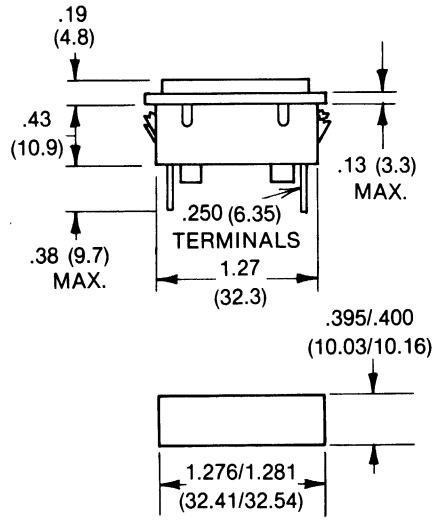


| LENS COLOR | NEON<br>MODEL NO. 105-125VAC<br>.250 TERMINALS | INCANDESCENT<br>MODEL NO. 28V<br>.250 TERMINALS |
|---|---|---|
| Red | 2330QD1 | 2390QD1-28V |
| Amber | 2330QD3 | 2390QD3-28V |
| White | 2330QD4 | 2390QD4-28V |
| Green | 2332QD5* | 2390QD5-28V |
| Lamp | C6A + Resistor | #2187 |

* Incorporates G2B lamp and resistor.

Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




MOUNTING HOLE REQUIRED

ALL DIMENSIONS ARE IN INCHES (MM).

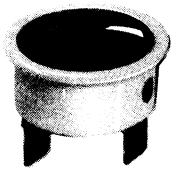
# SERIES 2620QK 7/8" DIA.

**FEATURES** **Mounting:** Supplied with push-on speednut SN2089 (see page 170)

**Terminals:** Tinned brass

**Lens:** Polycarbonate

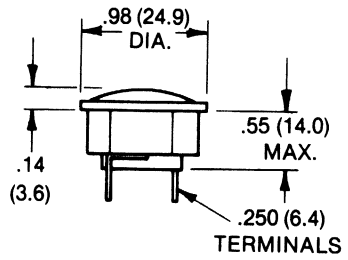
**Housing:** White nylon

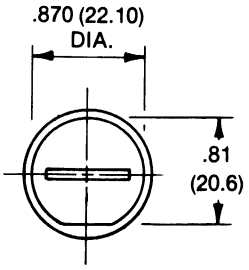


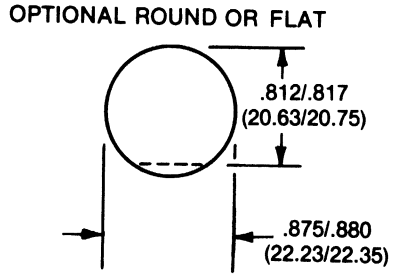
| NEON | |
|---|---|
| MODEL NO. 105-125VAC .250 TERMINALS | LENS COLOR |
| 2620QK1 | Red |
| 2620QK3 | Amber |
| 2620QK4 | White |
| 2622QK5* | Green |
| C2A + Resistor | Lamp |

* Incorporates G2B lamp and resistor
Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2620K 7/8" DIA.

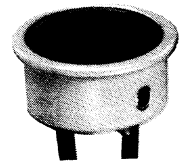
**FEATURES**

**Mounting:** Supplied with push-on speednut SN2089 (see page 170)

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (112/122.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

**Housing:** White nylon

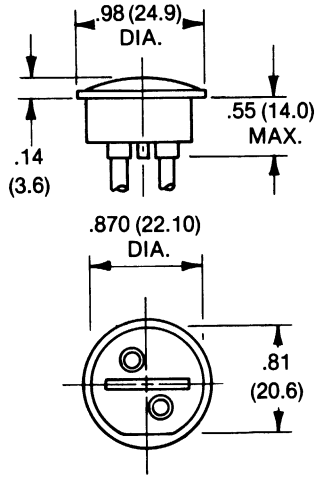


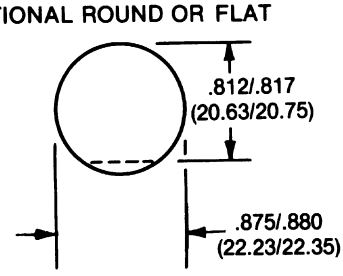
| NEON | |
|---|---|
| MODEL NO. 105-125VAC WIRE LEADS | LENS COLOR |
| 2620K1 | Red |
| 2620K3 | Amber |
| 2620K4 | White |
| 2622K5* | Green |
| C2A + Resistor | Lamp |

* Incorporates G2B lamp and resistor

Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2620T 7/8" DIA.

**FEATURES**

**Mounting:** Supplied with push-on speednut SN2089 (see page 170)

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (112/122.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

**Bezel:** Mirror finish chrome plated brass

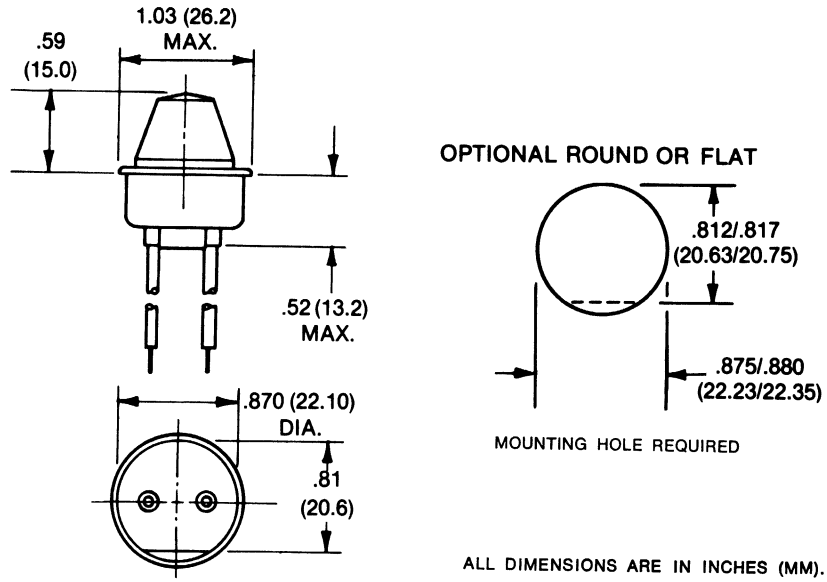
**Housing:** White nylon

| NEON | | |
|---|---|---|
| MODEL NO. 105-125VAC | MODEL NO. 208-250V | LENS COLOR |
| 2620T1<br>2620T3<br>2622T5* | 2621T1<br>2621T3<br>2623T5* | Red<br>Amber<br>Green |
| C2A + Resistor | | Lamp |

* Incorporates G2B lamp and resistor

Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

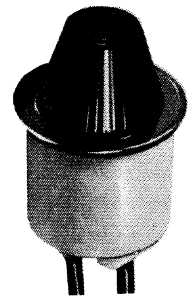
## OUTLINE DIMENSIONS




ALL DIMENSIONS ARE IN INCHES (MM).

# SERIES 2650T 7/8" DIA. FLASHERS

**FEATURES** These neon flashers incorporate a built-in flashing circuit to provide unmistakable indication even in high ambient light environments. Bulb is up into the lens and can be seen from any angle.



**Mounting:** Supplied with push-on speednut SN2089 (see page 170)

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (112/122.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

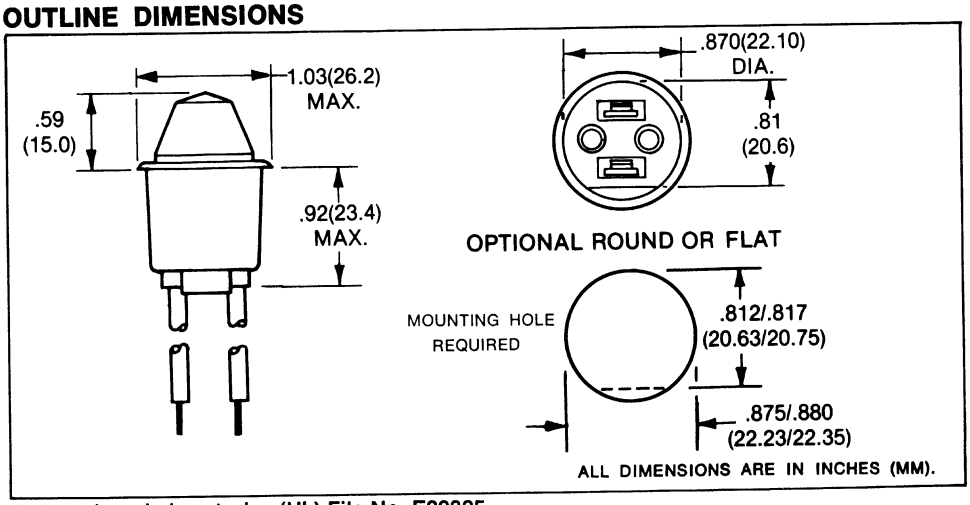
**Bezel:** Mirror finish chrome plated brass

**Housing:** White nylon

| NEON | |
|---|---|
| MODEL NO. 105-125VAC | LENS COLOR |
| 2650T1<br>2650T3 | Red<br>Amber |
| C2A + Resistor | Lamp |

Note: Flashing rate 60 to 120 per minute

## OUTLINE DIMENSIONS




Underwriters Laboratories (UL) File No. E20325
Canadian Standards Association (CSA) File No. 13346

# SERIES 3620QD 5/16" x 55/64"

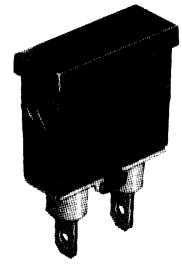
**FEATURES**

**Mounting:** Will snapfit into .020/.130 (0.51/3.30) thick panel.

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Terminals:** Tinned brass

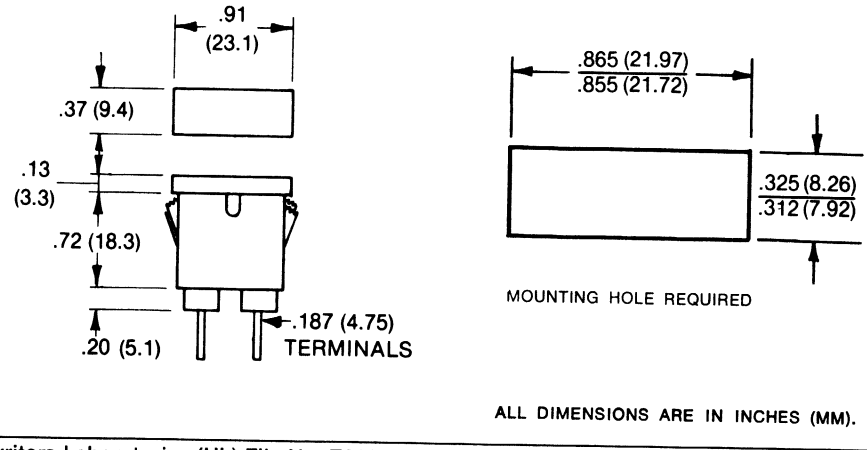
**Lens:** Polycarbonate



| LENS COLOR | NEON<br>MODEL NO. 105-125VAC<br>.187 TERMINALS |
|---|---|
| Red<br>Amber<br>White<br>Green | 3620QD1<br>3620QD3<br>3620QD4<br>3622QD5* |
| Lamp | C2A + Resistor |

* Incorporates G2B lamp and resistor.

## OUTLINE DIMENSIONS




Underwriters Laboratories (UL) File No. E20325
Canadian Standard Association (CSA) File No. 13346

## NON-RELAMPABLE

# SERIES 3620D 5/16" x 55/64"

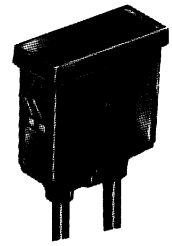
**FEATURES**

**Mounting:** Will snapfit into .020/.130 (0.51/3.30) thick panel.

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Terminals:** Tinned brass

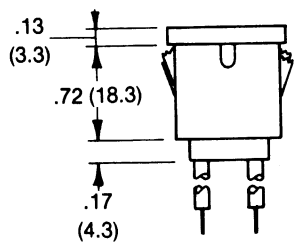
**Lens:** Polycarbonate

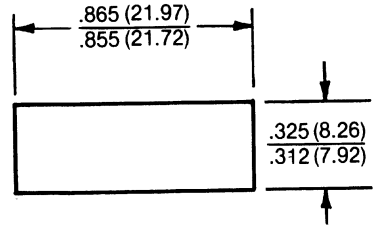


| LENS COLOR | NEON<br>MODEL NO. 105-125VAC<br>WIRE LEADS |
|---|---|
| Red<br>Amber<br>White<br>Green | 3620D1<br>3620D3<br>3620D4<br>3622D5* |
| Lamp | C2A + Resistor |

* Incorporates G2B lamp and resistor.

## OUTLINE DIMENSIONS




MOUNTING HOLE REQUIRED

ALL DIMENSIONS ARE IN INCHES (MM).

Underwriters Laboratories (UL) File No. E20325
Canadian Standard Association (CSA) File No. 13346

# SERIES 4700A, 5/16" DIA., 4.5MM. DIA.

**FEATURES** MINI-DOT 4700 Series Indicator Lights are small, attractive, and economical. The assembly consists of a lens which is inserted into the front of the panel, plus a lamp housing which slides on from the rear. The lamp is positioned directly behind the lens to provide maximum brightness.


4700A

**Mounting Hole:** .312/.317 (7.92/8.05) dia. in panels .020/.125 (.513/3.18) thick

**Wire Leads:** No. 22 AWG (105°C) 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

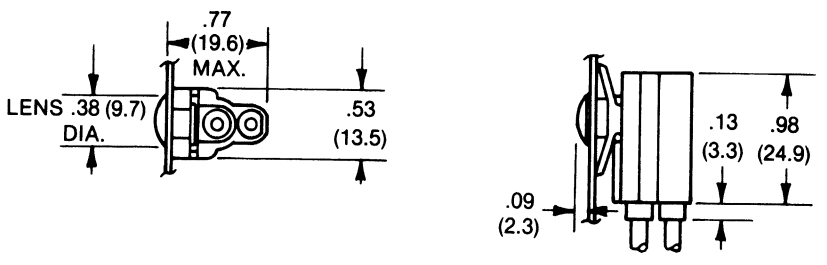
**Housing:** White nylon

| NEON | |
|---|---|
| LENS COLOR | MODEL NO. 105-125VAC |
| Red | 4700A1 |
| Amber | 4700A3 |
| White | 4700A4 |
| Green | 4702A5* |
| Blue | — |
| Yellow | — |
| Lamp | C2A + Resistor |
| Lead Color | Black |

* Incorporates G2B lamp and resistor.

Underwriters Laboratories (UL) File No. E20325 —
Canadian Standards Association (CSA) File No. 13346

## OUTLINE DIMENSIONS



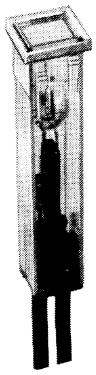

ALL DIMENSIONS ARE IN INCHES (MM).

# NON-RELAMPABLE

Economical GLO-DOT 5900 Series Square Indicator Lights combine attractive appearance with easy snap-in mounting. Tamper-proof housings are rugged and long-lived.

- Neon models are supplied complete with a built-in current-limiting resistor. LED models are supplied complete with a built-in current-limiting resistor and a rectifier diode.
- UL Recognized — CSA Approved

## SERIES 5900K, 5991K, 5/16" x 5/16" SQ.



**FEATURES**

**Mounting:** Will snap-fit into .315/.312 (8.00/7.92) sq. hole in panels .02/.13 (.5/3.3) thick

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

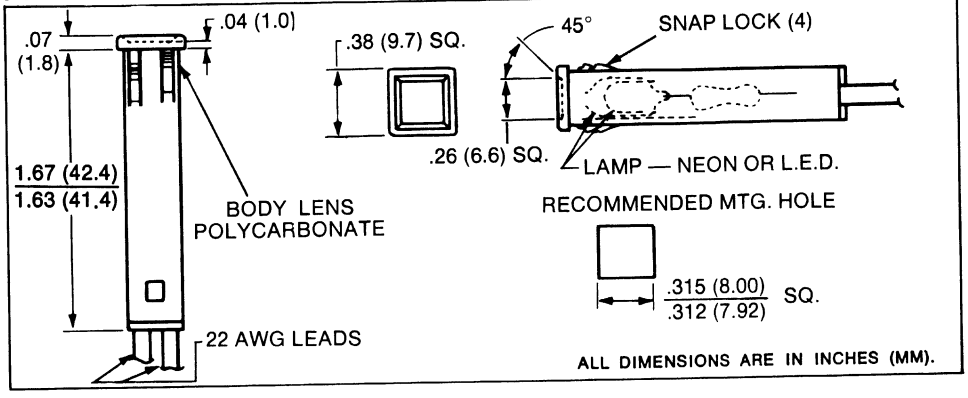
**Lens:** Polycarbonate

**Anode (+):** Red lead

| LENS COLOR | NEON | SOLID STATE | | |
|---|---|---|---|---|
| | MODEL NO. 105-125VAC | MODEL NO. 12V | MODEL NO. 24V | INCORPORATES LED |
| Red | 5900K1 | 5991K1-12V | 5991K1-24V | 4305H1 |
| Amber | 5900K3 | — | — | — |
| Green | 5902K5† | 5991K5-12V | 5991K5-24V | 4305H5 |
| Yellow | — | 5991K7-12V | 5991K7-24V | 4305H7 |
| Internal Resistor (Ohms) | — | 390* | 1000* | — |
| Lamp | C2A + Resistor | — | — | — |

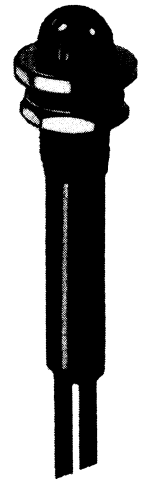
† Incorporates G2B lamp and resistor
* Also incorporates 1N4004 (400 P.I.V.) rectifier diode

## OUTLINE DIMENSIONS



# SERIES 6010M, 6011M, 6091M 3/8" DIA.

- Solid state lights complete with built-in current-limiting resistor and rectifier diode
- Meets NEMA Class 13



**FEATURES**

**Mounting:** .38 (9.65) min. dia. hole. Supplied with internal tooth lock washer and hex nut.

**Wire Leads:** No. 22 AWG (105°C), 4.4/4.8 (111.8/121.9) long, stripped .43/.57 (10.9/14.5)

**Lens:** Polycarbonate

**Bezel:** Chrome plated brass

**Gaskets:** Buna-N

**Housing:** Black nylon

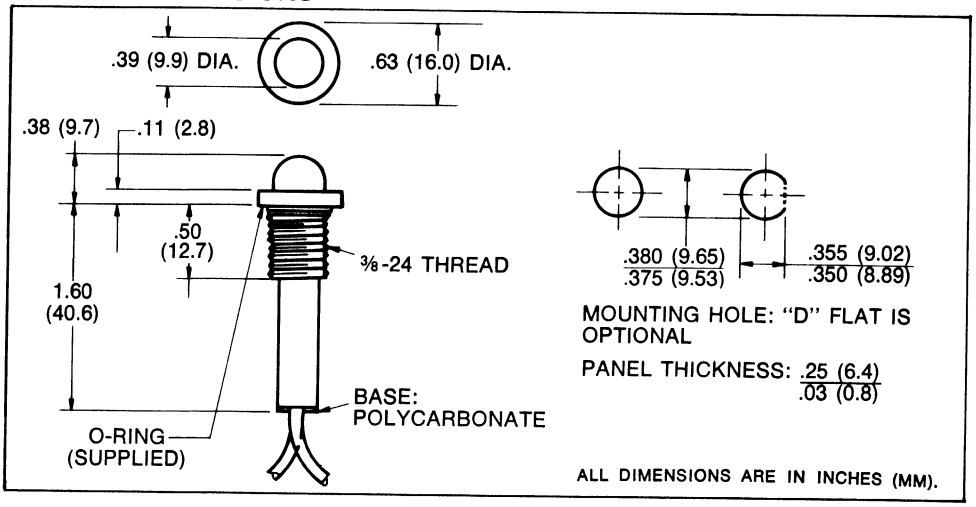
| LENS COLOR | MODEL NO. FOR 105-125VAC | MODEL NO. FOR 208-250VAC |
|---|---|---|
| Red<br>Amber<br>Green | 6010M1<br>6010M3<br>6012M5* | 6011M1<br>6011M3<br>6013M5* |
| Lamp | C2A + Resistor | C2A + Resistor |
| Lead Color | Black | 1-Black, 1-Red |

* Incorporates G2B lamp and resistor.

| LENS COLOR | MODEL NO. FOR 12V | MODEL NO. FOR 24V | INCORPO-RATES LED |
|---|---|---|---|
| Red | 6091M1-12V | 6091M1-24V | 4304H1 |
| Green | 6091M5-12V | 6091M5-24V | 4304H5 |
| Yellow | 6091M7-12V | 6091M7-24V | 4304H7 |
| Internal Resistor (OHMS) | 390 | 1000 | |

Note: Also incorporates 1N4004 (400 P.I.V.) rectifier diode.

## OUTLINE DIMENSIONS




NON-RELAMPABLE

# STANDARD VARIATIONS

Catalog model non-relampable indicator lights are listed on the preceding pages. You are by no means limited to those specific models; every year IDI makes millions of non-relampable assemblies with specifications tailored to customer requirements.

The difference between "standard variation" and catalog model may be no more than an inch of lead length — any change in specification means a new model. Because there are so many variations available, we cannot code all of them into the model number. However, after you determine exact specifications for the assembly which meets your needs, we will assign a unique model number for ordering purposes.

Standard variations include lens shape, color, and imprint; mounting and termination; operating voltage, rated life, and circuit. The table below provides a guide to the options available with each series; please note that some IDI constructions are available **only** as standard variations.

The following pages show variations available promptly, and without tooling cost (modest set-up charges may apply in some cases.)

# STANDARD VARIATIONS
# QUICK SPECIFICATON REFERENCE

Because there are so many variations available, we cannot code all of them into the model number. However, after you determine exact specifications for the assembly which meets your needs, we will assign a unique model number for ordering purposes.

| Series | Mounting Holes | OFF-THE-SHELF | | | | STANDARD VARIATIONS | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Catalog Location | Lamps | | | Lens | Housing | Bezel | Termination |
| | | | Neon | Incnd | Led | | | | |
| **1000** | 1/2" Diameter | Pgs. 124-133 | X | X | X | Pg. 159 | Pg. 168 | Pg. 169 | Pg. 169 |
| **2100** | 5/16" Diameter | Pgs. 134-142 | X | X | X | Pg. 160 | Pg. 168 | Pg. 169 | Pg. 169 |
| **2300** | 1 9/32" x 13/32" Rectangular | Pgs. 145-146 | X | X | | Pg. 161 | Pg. 168 | Pg. 169 | Pg. 169 |
| **2600** | 7/8" or 1" Diameter | Pgs. 147-150 | X | X | | Pg. 162 | Pg. 168 | Pg. 169 | Pg. 169 |
| **2900** | 3/8", 5/16" or 1/2" Diameter | Pgs. 143-144 | | X | | Pg. 163 | Pg. 168 | Pg. 169 | Pg. 169 |
| **3500** | 1 19/32" x 21/32" Rectangular | Not Offered | | | | Pg. 164 | Pg. 168 | Pg. 169 | Pg. 169 |
| **3600** | 5/16" x 55/64" Rectangular | Pgs. 151-152 | X | | | Pg. 164 | Pg. 168 | Pg. 169 | Pg. 169 |
| **3700** | 5/16" Diameter | Not Offered | | | | Pg. 162 | Pg. 168 | Pg. 169 | Pg. 169 |
| **3900** | 7/32" Diameter | Pg. 35 | | | X | Pg. 162 | Pg. 168 | Pg. 169 | Pg. 169 |
| **4500** | Behind panel mount with 1/4" button available | Not Offered | | | | Pg. 162 | Pg. 168 | Pg. 169 | Pg. 169 |
| **4700** | 11/64", 1/4" or 5/16" Diameter | Pg. 153 | X | X | | Pg. 165 | Pg. 168 | Pg. 169 | Pg. 169 |
| **5900** | 5/16" x 5/16" Square | Pg. 154 | X | | X | Pg. — | Pg. 168 | Pg. 169 | Pg. 169 |
| **6000** | 3/8" Diameter | Pg. 155 | X | | X | Pg. — | Pg. 168 | Pg. 169 | Pg. 169 |

## HOW TO ORDER (Please specify all of these.)

- ☐ **Indicator Light Series** — Which of the indicator light assemblies series do you want?
- ☐ **Lens Shape & Color** — Normally transparent colors for neon and solid-state lamps; translucent for incandescent lamps unless you specify otherwise.
- ☐ **Operating Voltage** — Also tell us whether you will use AC or DC for low voltage applications.
- ☐ **Termination** — Standard leads will be supplied unless you specify otherwise.
- ☐ **Mounting** — Push-on speednut unless otherwise specified. For snap-fit you **must** specify panel thickness.
- ☐ **How Many Samples Needed?** — One unless otherwise specified.
- ☐ **Anticipated Production Usage?** — Estimated annual quantity.

(Specify only those items which apply to your needs.)

**Imprint?** (Include color)

**Special Bezel Finish?**

**Special Lead Color or Insulation?**

**Extra Long Life Needed?** (How long?)

**High Temperature Housing Needed?** (How hot?)

**Space Problems?** (How much room behind or in front of the panel do you have?)

**Special Environmental Problems?** (Gasketing needed?)

Please be sure to include name, date, company, address, city, state, zip code, and telephone.

Detailed dimension drawings of most constructions are available on request.

Send or call in your specifications to:
**Industrial Devices, Inc.**, Edgewater, New Jersey 07020, Tel: 201-224-4700.

# LENSES

All lenses are available in polycarbonate (Lexan) in a full range of transparent and translucent colors. Many lenses are alternately available in nylon.

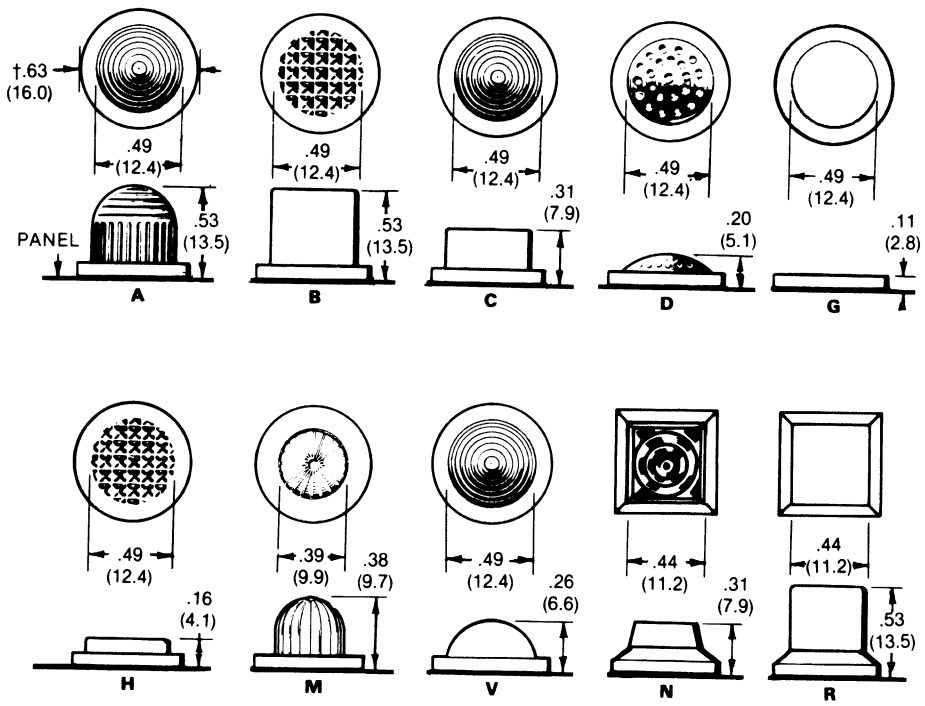
Transparent red, clear, amber or white polycarbonate; translucent red, amber or white nylon are recommended with neon lamps; green polycarbonate with green glow lamps; transparent polycarbonate in clear, red, green or yellow with LEDs, a full range of transparent or translucent polycarbonate lenses for incandescent lamps.

Lenses are available with a variety of treatments to diffuse light and minimize "hot spots". Some have molded in ribs or facets to provide a jewel-like appearance in transparent colors, others are stippled or frosted to spread light without interfering with imprint legibility.

Flat lenses such as LINE-O-LITE "LP" and "LT" can be polycarbonate film rather than molded.

## OUTLINE DIMENSIONS

### 1000 SERIES




† COMMON TO ALL GROUPS

NOTE: VERTICAL DIMENSION GIVEN IS HEIGHT ABOVE PANEL.

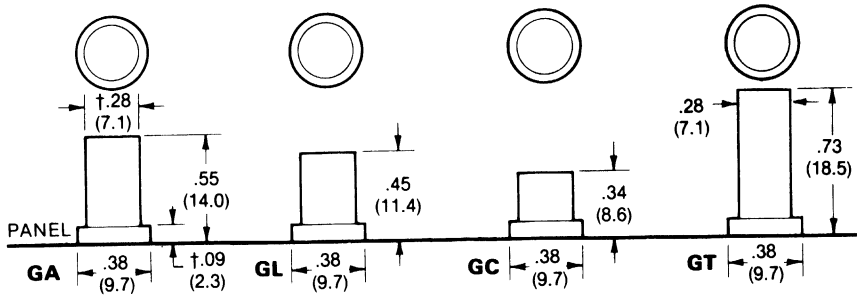
ALL DIMENSIONS ARE IN INCHES (MM).

STANDARD VARIATIONS

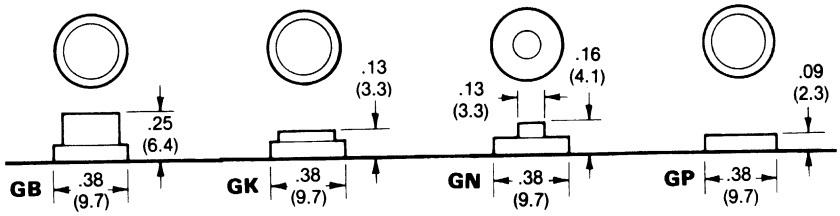
# LENSES

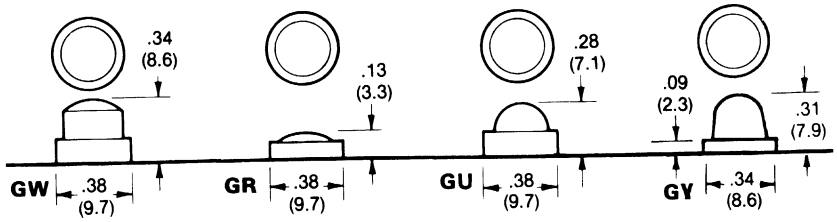
## OUTLINE DIMENSIONS

### 2100 SERIES — METAL BEZELS

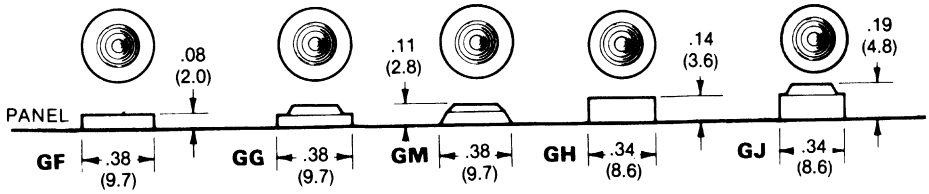



†COMMON TO ALL GROUPS NOTE: GC–PLAIN TOP GX–WITH LIGHT DIFFUSING RINGS




### NYLON BEZELS



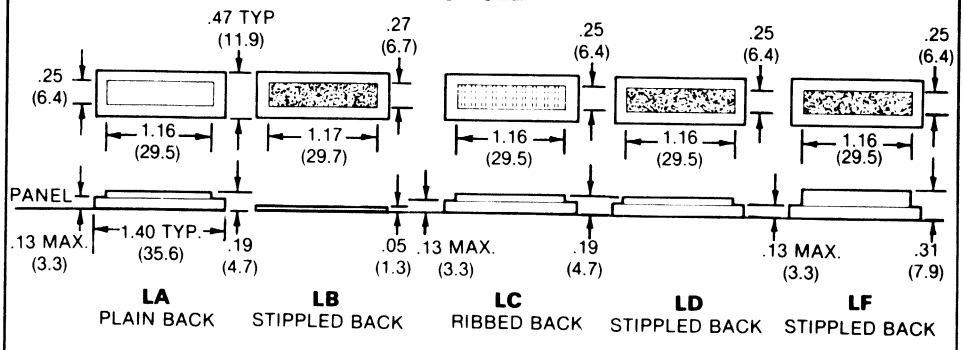

ALL DIMENSIONS ARE IN INCHES (MM).

# LENSES

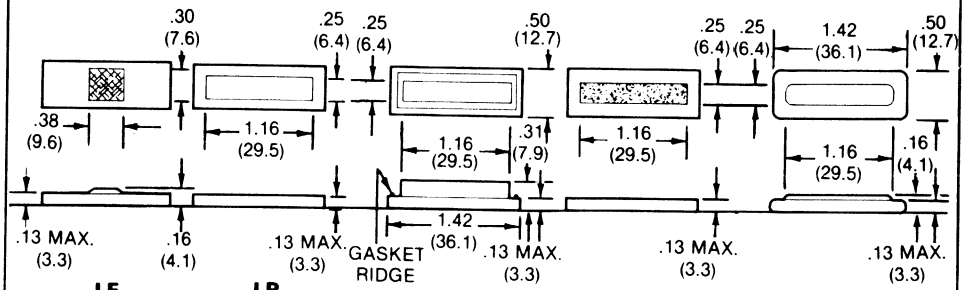
## OUTLINE DIMENSIONS

### 2300 SERIES

**SINGLE**

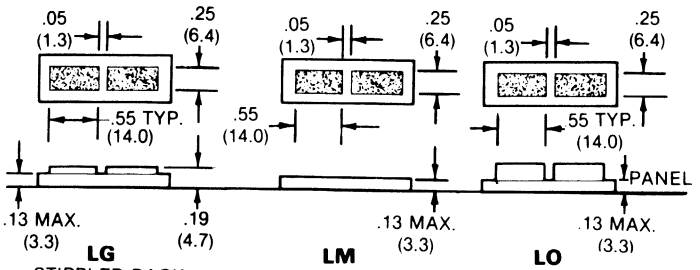



**LA** PLAIN BACK
**LB** STIPPLED BACK
**LC** RIBBED BACK
**LD** STIPPLED BACK
**LF** STIPPLED BACK




**LE** KNURLED BACK
**LP** PLAIN BACK
**LR** (BEZEL-1PC PLASTIC) PLAIN BACK
**LT** STIPPLED BACK
**LV** (BEZEL-1 PC PLASTIC) STIPPLED BACK

**DUAL**




**LG** STIPPLED BACK
**LM** (DUAL) STIPPLED BACK & FRONT
**LO** (DUAL) STIPPLED BACK

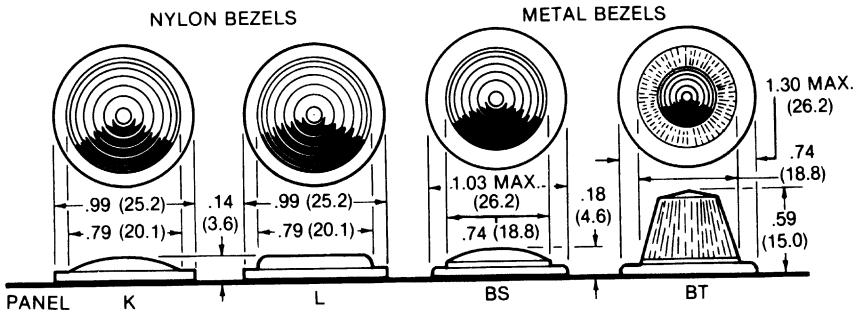
ALL DIMENSIONS ARE IN INCHES (MM).

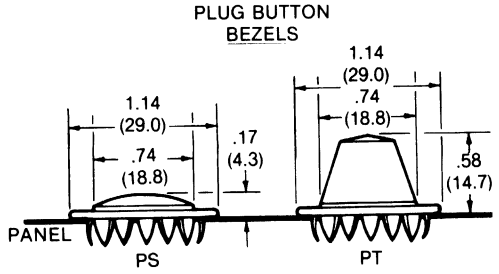
STANDARD VARIATIONS

# LENSES

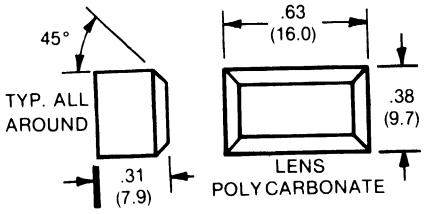
## OUTLINE DIMENSIONS

### 2600 SERIES

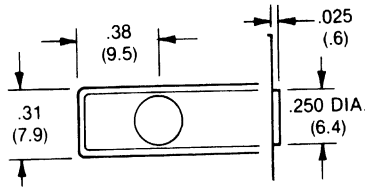


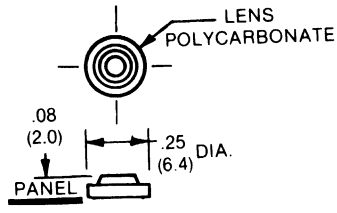

### 3700 SERIES




### 4500 SERIES




### 3900 SERIES

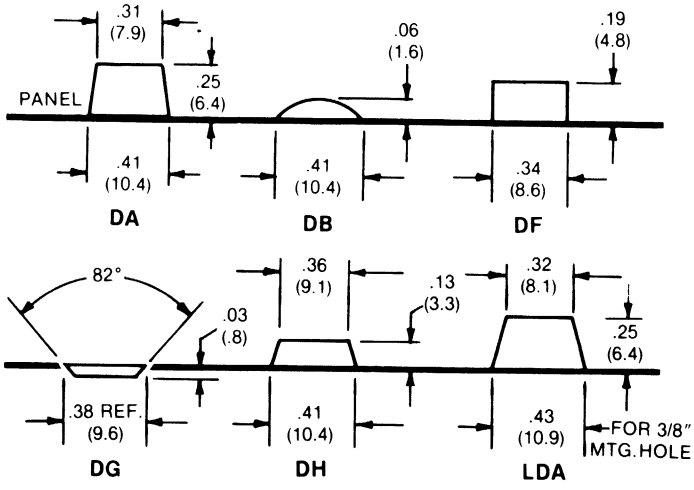



ALL DIMENSIONS ARE IN INCHES (MM).

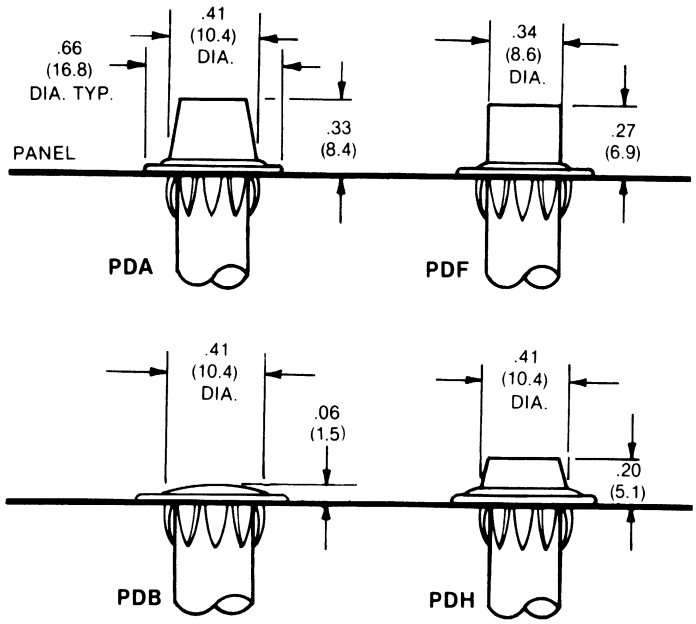
# LENSES

## OUTLINE DIMENSIONS

### 2900 SERIES SPEEDNUT OR SNAP-FIT MOUNTING




### PLUG-BUTTON BEZEL



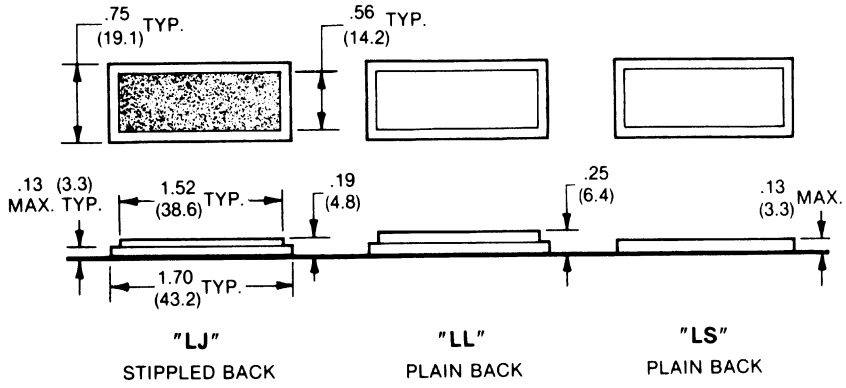

ALL DIMENSIONS ARE IN INCHES (MM).

STANDARD VARIATIONS

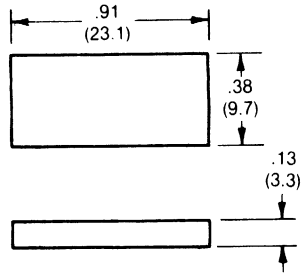
# LENSES

## OUTLINE DIMENSIONS

### 3500 SERIES



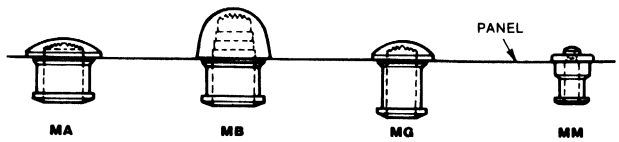

### 3600 SERIES




ALL DIMENSIONS ARE IN INCHES (MM).

# LENSES

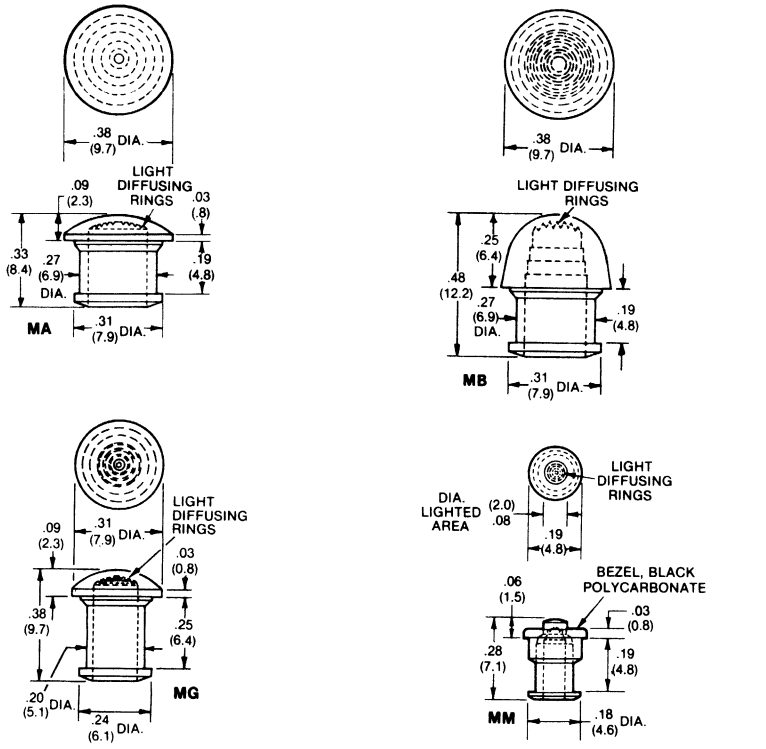
## 4700 SERIES




All lenses are transparent polycarbonate.

| LENS COLOR | "MG" MODEL NO. | "MM" MODEL NO. | "MA" MODEL NO. | "MB" MODEL NO. |
|---|---|---|---|---|
| Red | 4721 | 4731 | 4741 | 4751 |
| Clear | 4722 | 4732 | 4742 | 4752 |
| Amber | 4723 | 4733 | 4743 | 4753 |
| White | 4724 | 4734 | 4744 | 4754 |
| Green | 4725 | 4735 | 4745 | 4755 |
| Blue | 4726 | 4736 | 4746 | 4756 |
| Yellow | 4727 | 4737 | 4747 | 4757 |

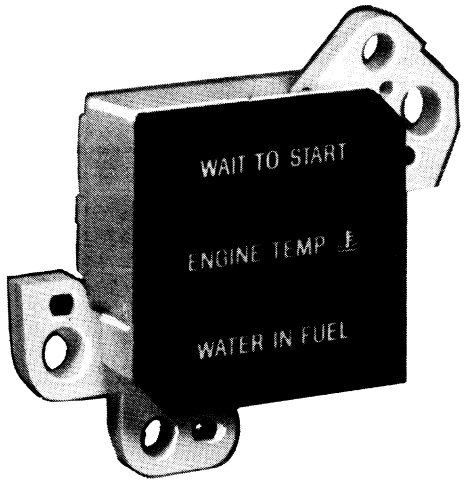
## OUTLINE DIMENSIONS

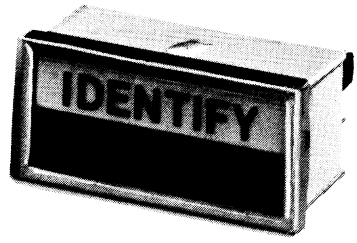



ALL DIMENSIONS ARE IN INCHES (MM).

STANDARD VARIATIONS

# IMPRINTING




## HOT STAMPING

All flat-top lenses can be hot stamped in white, black or other colors. Hot stamping is an economical technique which results in a permanent imprint highly resistant to abrasion and solvents. For new legends there is a one-time engraving charge to prepare the hardened steel stamp. (Some curved lenses may also be hot-stamped, usually with higher initial tooling cost.)

Use of imprint color which contrasts with lens color permits high visibility when the lens is not illuminated. For example, black imprint on a white or amber lens is legible with the lamp off or on. However, while black imprint on a red lens is quite visible when the lamp is lit, it does not provide good contrast when the lamp is off. White on red or white on amber have the opposite effect: good contrast when the light is off, relatively poor contrast when the light is on.

Imprinting may also be made on the underside of the lens. This tends to obscure the legend until the lamp is lit. Black legend under red lens is the most effective combination.

## SILK SCREENING

LINE-O-LITE flat lenses "LP" and "LT" may be supplied with silk-screened lenses; screened inserts may also be used under clear "LA" or "LL" lenses. Silk screening can be used to provide reverse imprints (background is opaque, only the legend lights), dead-front legends (legend is visible only when light is on), and a number of other special effects. Range of colors is unlimited.

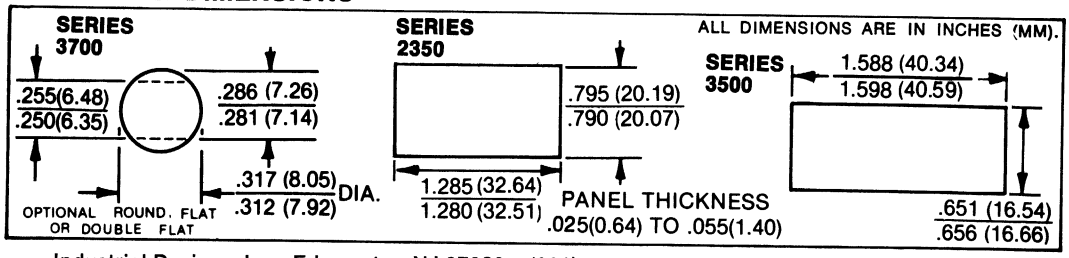
There is a one-time screen preparation charge. Silk screening is quite economical for long runs, but because setup is more costly than for hotstamping, prices are somewhat higher for modest quantities.

# MOUNTING INFORMATION

Most series offer a choice of mounting means including snap-fit, push-on speednut, etc. Snap-fit is most economical for production applications. Speednuts offer fast, tamper-resistant installation for any panel thickness.

| Series | Mounting Hole | ALTERNATE MOUNTING MEANS | | | Notes |
|---|---|---|---|---|---|
| | | Speednut (See Page ) | Specific Snap-Fit | Universal Snap-Fit (Fits Variety of Panel Thicknesses) | |
| **1000** | 1/2" Dia. Round or "D" | SN0461 (Alt: SN1264, SN1336) | Specify Panel Thickness | .020/.100 (.51/2.54) Standard Range .095/.135 (2.41/3.43) High Range | |
| **2100** | 5/16" Dia. Round | SN1287 | Specify Panel Thickness | None | |
| **2300** | 19/32" x 13/32" Rectangular | SN1963 | Specify Panel Thickness | .032/.100 (.81/2.54) | |
| | 19/32" x 51/64" Rectangular (Dual housing) | None | Specify Panel Thickness | None | |
| **2600** | 7/8" Dia. Round or "D" | SN2089 | Specify Panel Thickness | None | |
| | 1" Dia. Round | None | None | .080/.130 (2.03/3.30) | |
| **2900** | 5/16" Dia. Round | SN1287 | Specify Panel Thickness | .020/.062 (.51/1.57) | |
| | 3/8" Dia. Round | SN1287 | None | .025/.100 (.64/2.5) | LDA lens |
| | 1/2" Dia. Round | None | None | .030/.095 (.76/2.41) | |
| **3500** | 119/32" x 21/32" Rectangular | None | Specify Panel Thickness | None | |
| **3600** | 55/64" x 5/16" Rectangular | None | None | .020/.130 (.51/3.30) | |
| **3700** | 5/16" Dia. Round, "D", or double flat | SN1287 | Specify Panel Thickness "D" hole only | None | |
| **3900** | 7/32" Dia. Round | SN2763 | None | .031/.062 (.79/1.57) | |
| **4500** | Special | None | None | None | Special in user-supplied clip |
| **4700** | 5/16" Dia., 1/4" Dia. 4.5 mm Dia. All Round | None | None | None | |
| **5900** | 5/16" x 5/16" Square | None | None | .020/.130 (.5/33) | |
| **6000** | 3/8" Dia. Round | None | None | None | |

## OUTLINE DIMENSIONS




STANDARD VARIATIONS

# HOUSINGS

Many housings are available in different lengths depending on construction. Normally the shortest length which will accommodate the lamp and other components will be supplied. Where behind-panel space is limited, GLO-DOT 2100 and 2900 Series can often be supplied with shorter housings by placing the current-limiting resistor in one lead.

## MATERIALS AVAILABLE

| SERIES | NYLON | POLYCARBONATE | POLYSULFONE | NOTES |
|---|---|---|---|---|
| **1000** | X | | X | Also phenolic |
| **2100** | X | | X | |
| **2300** | X | | X | "Double-Depth" housing available for better light distribution |
| **2600** | X | | X | |
| **2900** | | X | X | Base is nylon |
| **3500** | X | | | |
| **3600** | X | X | | |
| **3700** | | X | | |
| **3900** | X | | | |
| **4500** | | X | | |
| **4700** | X | | | |
| **5900** | | X | | |
| **6000** | X | | | |

## MATERIAL

**Nylon** rated 105°C., white is standard, opaque black and special colors also available.

**Polycarbonate** rated 105°C.

**Polysulfone** rated 140°C. Off-white is standard, opaque black available.

**Phenolic** rated 150°C. Black only.

## GASKETING & POTTING

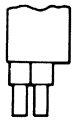
Most models with metal bezels are available with gasket seals between lens and bezel, providing a nominal splashproof construction. OMNI-GLOW 1000 Series is available with a closed-cell sponge gasket under the bezel.

Most models may be supplied potted with clear silicone elastomer for waterproofing and/or cushioning of incandescent lamps.

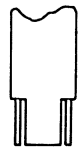
# LEADS AND TERMINATIONS

| SERIES | WIRE LEADS | .250 TERM | .187 TERM | NOTES |
|---|---|---|---|---|
| **1000** | X | X | X | Also notched solder terminal (see below) |
| **2100** | X | | X | |
| **2300** | X | X | X | Also screw term. dual lamp versions available 3-lead (center common), 4-lead or three .250 term. dual housing (2350 Series) 3 term. |
| **2600** | X | X | | |
| **2900** | X | | X | |
| **3500** | X | X | | Also screw term. |
| **3600** | X | | X | |
| **3700** | X | | | |
| **3900** | X | | | Max. 24 AWG, .015 wall |
| **4500** | | | X | |
| **4700** | X | X | | |
| **5900** | X | | | |
| **6000** | X | | | |

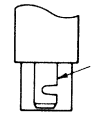
### TERMINATION TYPES



WIRE LEADS



QUICK-CONNECT



NOTCHED SOLDER

### WIRE LEADS

UL and CSA listed pre-tinned stranded wire leads, #22 AWG (7/30) with 105°C PVC insulation is standard, available in black and colors.

Other wire options include #18 AWG, #20 AWG and #24 AWG; solid wire, prebonded stranded wire.

High temperature insulations available include 150°C rated cross-linked polyolefin, Teflon, etc.

Lead length and termination to meet your application. Leads may be stripped any length or supplied with ring-tongue or quick-connect terminals.

Entire wire harnesses can be furnished.

### TERMINALS

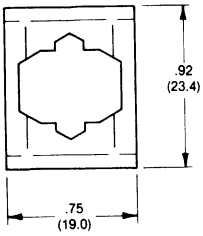
.187″ quick-connect terminals are .020″ thick brass, tinned, and may be used as solder terminals. .250″ quick-connect terminals are .032″ thick brass, tinned.

# BEZELS

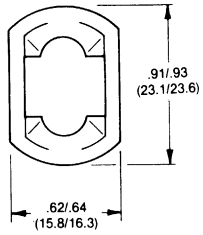
Metal bezels normally supplied in mirror-finished chrome, are alternately available in black, bright-dipped brass, or other finishes. (Metal bezels are shown in grey in the lens section.) Nylon bezels (OMNI-GLOW 2600 Series, GLO-DOT 2100 and 3900 Series) normally supplied in opaque white, also available in black and other colors. Please note that since the nylon bezel is part of the housing, lights with black nylon do not have as much light output as those with white bezels.

# SPEEDNUTS

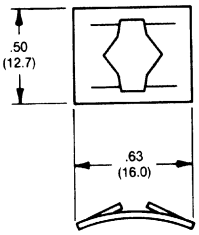
## SN0461
**For ½" Dia.**



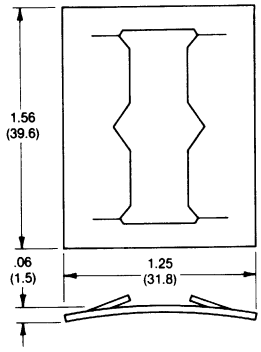

## SN1264
**For ½" Dia.**
**(with "D" Flat)**



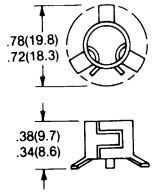

## SN1287
**For 5/16" Dia.**



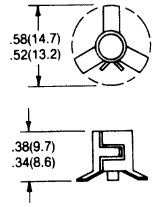

## SN1963
**For 1 9/32" x 13/32"**
**Rectangular**



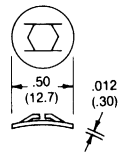

## SN1336
**For ½" Dia.**



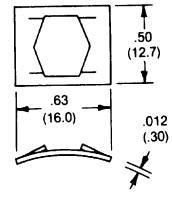

## SN1220
**For 19/64" Dia.**



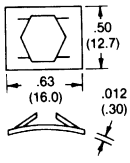

## SN2763
**For 7/32" Dia.**



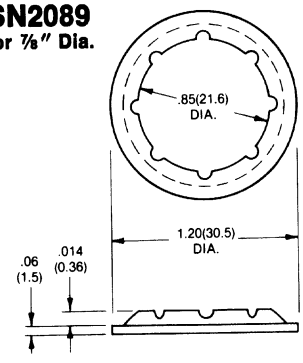

## SN3486
**For 3/8" Dia.**



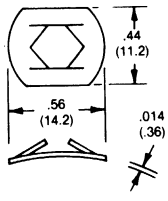

## SN2212
**For 19/64" Dia.**



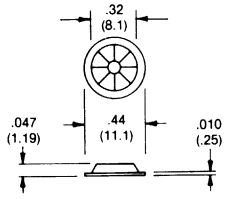

## SN2089
**For 7/8" Dia.**




## SN3678
**For ¼" Dia.**




## SN3775
**For 5/32" Dia.**




ALL DIMENSIONS ARE IN INCHES (MM).

# OTHER LAMPS AVAILABLE

## NEON

See Neon lamp section page

Any IDI neon assembly may be supplied without a resistor (where appropriate current-limiting impedance is incorporated in your circuit), or with a resistor included for specified service voltage or for extended life.

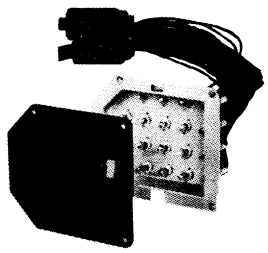
**INCANDESCENT** Other lamps available include:

| NOMINAL VOLTAGE | LAMP NO. | DESIGN VOLTAGE | DESIGN AMPS | MSCP (Approx.) | RATED LIFE (Hrs.) |
|---|---|---|---|---|---|
| 1V | 1728 | 1.35 | .06 | .01 | 5,000 |
| 2V | 2119 | 2.0 | .06 | .02 | 5,000 |
| 2V | 1783 | 2.5 | .20 | .20 | 1,000 |
| 2V | 2169 | 2.5 | .35 | .20 | 10,000 |
| 2V | 1738 | 2.7 | .06 | .04 | 6,000 |
| 6V | 1730 | 6.0 | .04 | .04 | 10,000 |
| 6V | 2180 | 6.3 | .04 | .03 | 20,000 |
| 6V | 1739 | 6.3 | .075 | .23 | 1,000 |
| 12V | 2181 | 14.0 | .20 | .40 | 20,000 |
| 10V | 1869 | 10.0 | .014 | .006 | 50,000 + |
| 10V | 2107 | 10.0 | .04 | .06 | 5,000 |
| 12V | 2174 | 12.0 | .04 | .10 | 10,000 |
| 12V | 2182 | 14.0 | .08 | .30 | 40,000 |
| 16V | 2102 | 18.0 | .04 | .15 | 10,000 |
| 28V | 2185 | 28.0 | .04 | .15 | 10,000 |
| 28V | 8361 | 28.0 | .065 | .65 | 5,000 |

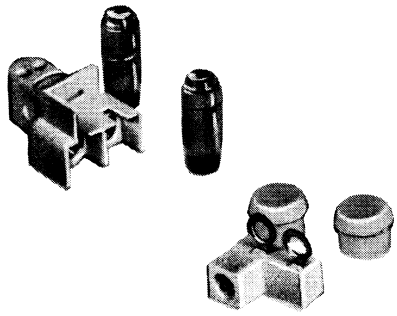
## LAMPS AVAILABLE

| SERIES | NEON | INCANDESCENT | LED | NOTES |
|---|---|---|---|---|
| **1000** | X | X | X | |
| **2100** | X | X | X | |
| **2300** | X | X | | Dual lamps (in parallel) available for more uniform lighting |
| **2600** | X | X | | |
| **2900** | X | X | X | |
| **3500** | X | X | | Dual lamps (in parallel) available for more uniform lighting |
| **3600** | X | X | | |
| **3700** | X | X | | |
| **3900** | X | X | X | T-1 size neon, LED<br>T-1 or T-1¼ incandescent |
| **4500** | X | X | | |
| **4700** | X | X | | |
| **5900** | X | X | X | |
| **6000** | X | X | X | |

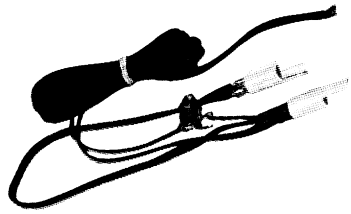
# CUSTOM PRODUCTS



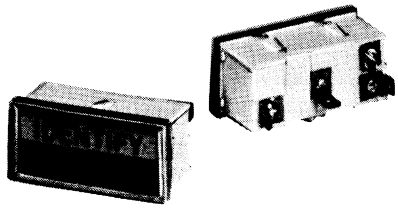
This 18 lamp module is used in intercity buses. IDI designed the unit to fit space available and meet customer functional needs. Housing is mounted to the bus dash with four internally threaded rivets, and the lens is then held in place with four screws. Since the divider is part of the lens, relamping can be accomplished easily when the lens is removed. Lens insert is screened in five colors, customized to accommodate variations in bus configuration. Sockets are IDI TINY-MITE 4100 Series, locked in place in the housing and wired to standard automotive connectors.



This light module system is used on solenoid-operated hydraulic valves. IDI supplies the terminal block (molded nylon with pressed-in inserts), light module (ultrasonic welded nylon with neon, incandescent or solid-state lamps depending on service voltage), light rod (molded acrylic) and panel lens (molded polycarbonate). The lens is inserted into a hole in the die cast cover, and the light rod pressed in from the rear to lock the lens in place and seal the opening.

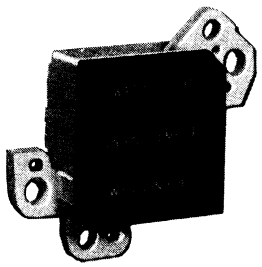


Complete wire harness for lighted vanity mirrors in automobile visors includes two TINY-MITE sockets plus a switch. All connections are spliced, covered with insulated sleeving where appropriate.

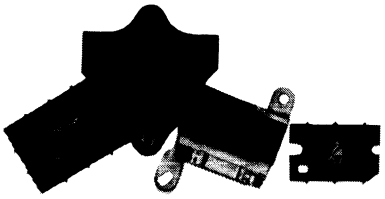


Three lamp indicator used in automatic bowling scorer has five terminals, four color screened lens, and built-in light barriers. This assembly is a custom variation in LINE-O-LITE 3500 Series.

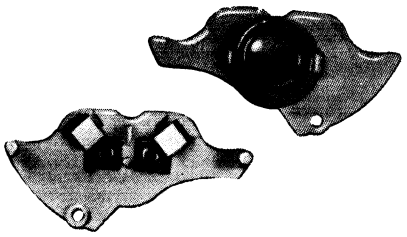
# CUSTOM PRODUCTS



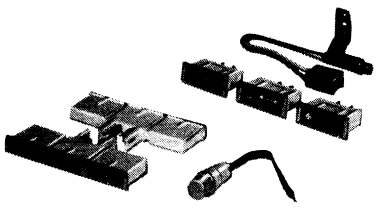
This three lamp incandescent assembly is used on a diesel-engine vehicle. IDI worked closely with customer engineers to meet appearance, dimensional, and electrical parameters. This was a rush project with tight delivery requirements, so molds were built in the IDI toolroom and initial samples shipped to meet deadline. Housing is nylon, lens frame and lens insert polycarbonate. Manufacturing techniques include crimping (electrical assembly), hot stamping, ultrasonic welding, and ultrasonic staking.



These lenses are used in automotive instrument clusters. Every year we make millions of polycarbonate film lenses, automatically hot stamped, blanked, and formed. Other lenses are molded polycarbonate or acrylic, with ultrasonic-welded inserts or crimped-on light shields.

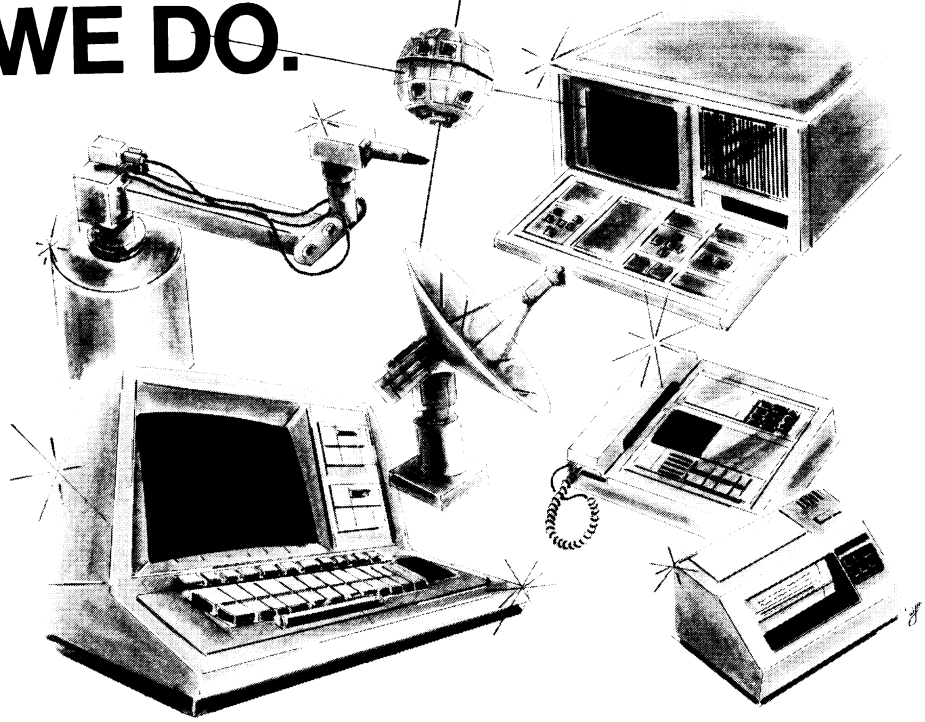


IDI builds a neon indicator light into a customer-supplied molded insulator for a manufacturer of vaporizers. Terminals are designed to make reliable contact with two threaded posts; the lens fits flush into an opening in the vaporizer cover.



These are non-relampable indicator lights in special sizes and configurations as needed to fit customer requirements. These are typical of the special shapes and sizes which can be tooled and produced if needed to meet your needs.

# IDI KNOW-HOW. IT'S IN EVERYTHING WE DO.



In business since 1945, IDI has been long established as **The Source** of indicator lights for many of the world's leading manufacturers. The company's reputation for quality has grown to the extent that it now supplies millions of attractive, useful, money-saving indicator lights, LED assemblies and sockets to industry each year. Applications include indicators for electronic equipment, computers, test equipment, scientific instruments, process-control equipment, automobiles and appliances.

Today, IDI operates multi-plant facilities in Edgewater and Cliffside Park, NJ. Here, complete in-house capability assures continuity in every phase of manufacturing. All operations — toolroom, plastic molding marking and assembly, through strict quality control — are carried out by IDI's highly trained specialists. Together with our engineering experts, they give IDI the technical capability to provide customers with superior standard products as well as innovative design solutions and full applications assistance.

IDI. Consider us your source for every indicator light need.

Industrial Devices, Inc., Edgewater, NJ 07020 • (201) 224-4700 Telex: 127459 Fax: 201 224 9095

**ENGINEER'S KIT**
**MODEL EK-3**

# MORE BRIGHT IDEAS FROM IDI

This handy compartmented plastic box filled with over $65.00 worth of IDI indicator lights is yours for only $25.00. Great for building prototypes and to stimulate ideas for future projects — or to solve problems in repair and maintenance.

You get 28 LEDs and LED assemblies. Twenty-one styles, three colors. Plain LEDs including SUPER-BRITE and EXTRA SUPER-BRITE, panel-mounted LEDs, P.C. board-mounted LEDs, complete assemblies including current-limiting resistors and rectifier diodes.

In addition 9 sockets and relampable incandescent lamp assemblies, and 13 incandescent and neon non-relampable assemblies. In all over a dozen styles, seven colors, five voltages, and five mounting hole sizes. Wire leads and terminal types.

The kit costs more than $25.00 for the samples, the box, putting it together, and getting it to you. But you can have Model EK-3 for a twenty-five dollar check or money order. But at this price, don't ask us to bill you—check or money order with your order, please.

**We have lots more where these came from**

These, and hundreds more IDI indicator lights, are in stock or ready fast from your local IDI distributor. Just ask our salesman. Send for your IDI Engineer's Kit now. Lots of bright ideas in a small package.


Industrial Devices, Inc., Edgewater, NJ 07020 • (201) 224-4700 Telex: 127459 Fax: 201 224 9095

# REPRESENTATIVES

### ALABAMA
EMA Inc.
1200 Jordan Lane-STE4
Huntsville, AL 35805
205-536-3044

### ARIZONA
Call Factory
201-224-4700

### NORTHERN CALIFORNIA
Westech Sales
2672 Bayshore Frontage Road
Mountainview, CA 94043
415-961-1422

### SOUTHERN CALIFORNIA
Universal Components Inc.
8703 La Tijera Blvd.
Los Angeles, CA 90045
213-641-4255

### COLORADO
Harthun Associates, Inc.
7388 S. Revere Pkwy. Ste. 602
Englewood, CO 80112
303-792-5050

### FLORIDA
Southern Electronic Mktg., Inc.
P.O. Box 1072
Casselberry, FL 32707
305-831-2822
Toll Free—Florida
800-432-3393

### GEORGIA
EMA Inc.
6695 Peachtree Indl. Blvd-S-109
Atlanta, GA 30360
404-448-1215

### ILLINOIS
Karl D. Engle Co.
3621 W. Devon Ave.
Chicago, IL 60659
312-539-1820

### INDIANA/KENTUCKY
Electronic Mktg. Cnsltnts., Inc.
5259 N. Tacoma Ave., Suite 8
Indianapolis, IN 46220
317-253-1668

### SOUTH JERSEY
ESA, Inc.
2420 Church St.
Cherry Hill, NJ 08002
609-667-4066

### KANSAS
Lowell-Kangas Associates, Inc.
5819 Nieman Rd.
Shawnee Mission, KS 66203
913-631-3515

### MARYLAND
ESA, Inc.
932 Dunellen
Towson, MD 21204
301-321-6008

### MASSACHUSETTS
Anchor Engineering Co.
188 Needham St.
Newton Upper Falls, MA 02164
617-964-6205

### MICHIGAN
Willard Spenser Co.
21500 Greenfield Rd, Room 108
Oak Park, MI 48237
313-967-0808

# REPRESENTATIVES

### MINNESOTA
Electric Component Sales, Inc.
4974 Lincoln Drive
Minneapolis, MN 55436
612-933-2594

### MISSOURI
Lowell-Kangas Associates, Inc.
12015 Manchester
St. Louis, MO 63131
314-821-4050

### NEW YORK METROPOLITAN
Dyno Rep., Inc.
212 S. Main St.
Manville, NJ 08835
201-685-0135

### UPSTATE NEW YORK
Apex Associates, Inc.
1133 Mt. Read Blvd.
Rochester, NY 14606
716-254-6050

### NORTH CAROLINA
EMA Inc.
9225 Honeycutt Creek Rd.
Raleigh, NC 27609
919-847-8800

### OHIO
J. C. Hoffstetter Co.
7014 River Styx Road
Medina, OH 44256
216-241-4880

J. C. Hoffstetter Co.
5244 Springboro Pike
Dayton, OH 45439
516-296-1010

### OREGON
Call Factory
201-224-4700

### SOUTH CAROLINA
EMA, Inc.
210 West Stone Ave.
Greenville, SC 29609
803-233-4637

### TEXAS
R. F. Kimball Co.
1200 Executive Dr. East St. 99
Richardson, TX 75081
214-231-3447

R. F. Kimball Co.
11210 Steeplecrest Drive—Suite 110
Houston, TX 77065
713-890-8810

R. F. Kimball Co.
2101 IH 35 So., S220B
Austin, TX 78741
512-443-5284

### WASHINGTON
Call Factory
201-224-4700

### WESTERN PENNSYLVANIA
J. C. Hoffstetter Co.
P.O. Box 101
Hickory, PA 15340
412-356-2305

### CANADA
Len Finkler & Co.
80 Alexdon Road
Downsview, Ontario, Canada M3J 2B4
416-630-9103

### EXPORT
Export Technicians, Inc.
375 No. Broadway
Jericho, NY 11753
516-931-3434

# CROSS REFERENCE

# IDI CROSS REFERENCE

## DATA DISPLAY

| Data Display | IDI Model # | Notes |
|---|---|---|
| 125-MA | 4303F7 | 1 |
| 125-MQ | 4303F5 | 1 |
| 125-MR | 4303F1 | 1 |
| 125-R | 4300F1 | 1 |
| 125-BR5V | 4302F1-5V | 1 |
| | | |
| 200-BA5V | 4302H3-5V | 1,3 |
| 200-BCQ | 4305H5 | |
| 200-BG5V | 4302H5-5V | 1,3 |
| 200-BR5V | 4302H1-5V | 1,3 |
| 200-BQ | 4304H5 | |
| 200-ECA | 4308H3 | |
| 200-ECQ | 4308H5 | |
| 200-ECR | 4308H1 | 2 |
| 200-ECY | 4308H7 | |
| 200-MA | 4304H7 | |
| 200-MCA | 4305H7 | |
| 200-MCQ | 4305H5 | 2 |
| 200-MCR | 4305H1 | |
| 200-MQ | 4304H5 | 2 |
| 200-MR | 4304H1 | |
| 200-MRG | 4301H1/5 | 1 |
| | | |
| P205-MA2-N | 5111F7 | |
| P205-MQ2-N | 5111F5 | |
| P205-MR2-N | 5111F1 | |
| P205W-MA2-N | 5110F7 | |
| P205W-MQ2-N | 5110F5 | |
| P205W-MR2-N | 5110F1 | |
| | | |
| P405-BQ-N | 5101H5 | |
| P405-MA-N | 5101H7 | |
| P405-MQ-N | 5101H5 | 2 |
| P405-MR-N | 5101H1 | |
| P405MA-N | 5101H7 | |
| P405W-BQ-N | 5100H5 | |
| P405W-MA-N | 5100H7 | |
| P405W-MQ-N | 5100H5 | 2 |
| P405W-MR-N | 5100H1 | |
| | | |
| PC080-A2 | 5350T7 | |
| PC080-Q2 | 5350T5 | |

| Data Display | IDI Model # | Notes |
|---|---|---|
| PC080-R2 | 5350T1 | |
| PC080-R5 | 5352T1-5V | |
| | | |
| PCH125-BQ | 5600F5 | |
| PCH125-BR | 5600F1 | |
| PCH125-MA | 5600F7 | 1 |
| PCH125-MG | 5600F5 | 1 |
| PCH125-MR | 5600F1 | 1 |
| PCH125-R | 5600F1 | 1 |
| PCH190-R | 5380E1 | |
| PCH200-BQ | 5380H5 | |
| PCH200-MA | 5300H7 | |
| PCH200-MQ | 5380H5 | 2 |
| PCH200-MR | 5380H1 | |
| | | |
| PCL190-R | 5300E1 | |
| PCL200-MA | 5300H7 | |
| PCL200-MQ | 5300H5 | 2 |
| PCL200-MR | 5300H1 | |
| PCL1254-R | 5360F1 | 1 |
| PCL1904-MG | 5640E5 | 1 |
| PCL1904-MR | 5640E1 | 1 |
| PCL2004-MG | 5640H5 | 1 |
| PCL2004-MR | 56401H | 1 |
| | | |
| PCV190-R | 5381E1 | |
| PCV200-BQ | 5381H5 | |
| PCV200-MA | 5381H7 | |
| PCV200-MQ | 5381H5 | 2 |
| PCV200-MR | 5381H1 | |
| | | |
| PLC200-BQ | 5300H5 | |
| | | |
| PMC-2 | 4304MC | |
| PML30-CR | 4331 | |
| PML30-CG | 4335 | |
| PML30-CY | 4337 | |
| PML40-CQ | 4315 | |
| PML40-CR | 4311 | |
| PML40-CW | 4312 | |
| PML40-CY | 4317 | |

**NOTES:**

1. Minor physical difference
2. IDI is brighter
3. Minor viewing angle difference

CROSS REFERENCE

# IDI CROSS REFERENCE

## DIALIGHT

| Dialco Model | IDI Model # | Notes |
|---|---|---|
| 135-3271 | 2851 | 3 |
| 135-3272 | 2855 | 3 |
| 135-3273 | 2853 | 3 |
| 135-3274 | 2856 | 3 |
| 135-3275 | 2854 | 3 |
| 135-3276 | 2857 | 3 |
| 507-3906-1471-600 | 2222B11-6 | 1 |
| 507-3906-1472-600 | 2222B15-6 | 1 |
| 507-3906-1473-600 | 2222B13-6 | 1 |
| 507-3906-1475-600 | 2222B14-6 | 1 |
| 507-3909-1471-600 | 2222B11-6.3 | 1 |
| 507-3910-1431-600 | 2222B1-10 | 1 |
| 507-3911-1431-600 | 2222B1-10A | 1 |
| 507-3913-1471-600 | 2222B11-14 | 1 |
| 507-3914-1471-600 | 2222B11-14A | 1 |
| 507-3917-0371-600 | 2222K11-28 | 1 |
| 507-3917-1431-600 | 2222B1-28 | 1 |
| 507-3917-1471-600 | 2222B11-28 | 1 |
| 507-3917-1472-600 | 2222B15-28 | 1 |
| 507-3917-1473-600 | 2222B13-28 | 1 |
| 507-3917-1475-600 | 2222B14-28 | 1 |
| 507-3918-1471-600 | 2222B11-28 | 1 |
| 507-3944-0333-600 | 2222K3-12 | 1 |
| 507-4537-1531-640 | 2222A1-1B-5 | 1 |
| 507-4538-1531-610 | 2222A1-1C-2 | 1 |
| 507-4538-1533-610 | 2222A3-1C-2 | 1 |
| 507-4538-1535-610 | 2222A4-1C-2 | 1 |
| 507-4538-1537-610 | 2222A2-1C-2 | 1 |
| 507-4757-3331-500 | 2222X1-S1-5 | 1 |
| 507-4757-3335-500 | 2222X4-S1-5 | 1 |
| 507-4757-3337-500 | 2222X2-S1-5 | 1 |
| 507-4757-3731-500 | 2222U1-S1-5 | 1 |
| 507-4857-3332-500 | 2222X5-S5-5 | 1 |
| 507-4857-3732-500 | 2222U5-S5-5 | 1 |
| 507-4957-3333-500 | 2222X3-S3-5 | 1 |
| 507-4957-3732-500 | 2222U5-S5-5 | 1 |
| 507-4957-3733-500 | 2222U3-S3-5 | 1 |
| 508-7538-504 | 2210 | 1 |
| 508-8738-504 | 2210 | 1 |
| 515-0004 | 4304MC | |
| 515-0012 | 2212LC | 1 |
| 515-0050 | 2212LC | 1 |
| 515-0051 | SN1220 | |
| 515-0074 | 2212LC | 1 |
| 52-1059-3191-102 | 2803 + 2811 | 1 |
| 52-1059-3192-102 | 2803 + 2815 | 1 |
| 52-1059-3193-102 | 2803 + 2813 | 1 |
| 52-1059-3194-102 | 2803 + 2816 | 1 |
| 52-1059-3195-102 | 2803 + 2814 | 1 |
| 52-1059-3196-102 | 2803 + 2817 | 1 |
| 52-1059-3197-102 | 2803 + 2812 | 1 |
| 52-3191 | 2811 | |
| 52-3192 | 2815 | |
| 52-3193 | 2813 | |
| 52-3194 | 2816 | |
| 52-3195 | 2814 | |
| 52-3196 | 2817 | |
| 52-3197 | 2812 | |
| 521-9165 | 4300S1 | 1,2 |
| 521-9175 | 4304H5 | 2 |
| 521-9176 | 4304H7 | 2 |
| 521-9177 | 4301H1/5 | 1 |
| 521-9180 | 4300E1NF | 1 |
| 521-9183 | 4302H1-5V | 1 |
| 521-9185 | 4307T1 | 1,2,3 |
| 521-9186 | 4307T1 | 1,2 |
| 521-9190 | 4304S1 | 1,3 |
| 521-9195 | 4307T1 | 1 |
| 521-9200 | 4300S1 | 1 |
| 521-9210 | 4303F5 | 1,2 |
| 521-9211 | 4303F7 | 1 |
| 521-9212 | 4304H1 | 2 |
| 521-9215 | 4302F1-5V | 1 |
| 521-9216 | 4300F1 | 1 |
| 521-9240 | 4304H1 | 2 |
| 521-9246 | 4304H1 | 1,2 |
| 521-9247 | 4305H1 | 1,2 |
| 521-9248 | 4304H7 | 1,2 |
| 521-9249 | 4305H7 | |
| 521-9250 | 4304H5 | 1,2 |
| 521-9251 | 4305H5 | 1,2 |
| 521-9253 | 4304S5 | 1,3 |
| 521-9254 | 4304S7 | 1,3 |
| 521-9264 | 4306R1 | 3 |
| 521-9265 | 4306R7 | 3 |
| 521-9266 | 4306R5 | 3 |
| 521-9277 | 4307T5 | 1 |
| 521-9279 | 4307T7 | 1 |
| 521-980 | 4300E1NF | 1 |
| 549-0101 | 5340H1 | 1,2 |
| 549-0104 | 5342H1-5V | 1 |
| 549-0201 | 5340H5 | 1,2 |
| 549-0301 | 5340H7 | 1,2 |
| 550-0204 | 5381H5 | 1,2 |
| 550-0205 | 5380H5 | 1,2 |
| 550-0206 | 5300H5 | 1,2 |
| 550-0206-004 | 5640E5 | |

**NOTES:**

1. Minor physical difference
2. IDI is brighter
3. Minor viewing angle difference

# IDI CROSS REFERENCE

## DIALIGHT

| Dialco Model | IDI Model # | Notes | Dialco Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| 550-0304 | 5381H7 | 1,2 | 555-3001 | 5370T1 | 1,2 |
| 550-0305 | 5380H7 | 1,2 | 555-3007 | 5372T1-5V | 5V, 3mA |
| 550-0306 | 5300H7 | 1,2 | | | |
| 550-0306-004 | 5640E7 | | 555-3301 | 5370T5 | 1,2 |
| 550-0404 | 5381E1 | 1 | | | |
| 550-0405 | 5380E1 | 1 | 558-0101-001 | 5111F1 | 1,2 |
| 550-0406 | 5300E1 | 1 | 558-0101-003 | 5110F1 | 1,2 |
| 550-0406-004 | 5640E1 | | 558-0201-001 | 5111F5 | 1,2 |
| 550-0504 | 5381H1-5V | 1 | 558-0201-003 | 5110F5 | 1,2 |
| 550-0505 | 5380H1-5V | 1 | 558-0301-001 | 5111F7 | 1,2 |
| 550-0506 | 5302H1-5V | 1 | 558-0301-003 | 5110F7 | 1,2 |
| 550-2204 | 5381H5 | 1 | | | |
| 550-2205 | 5380H5 | 1 | 559-0101-001 | 5101H1 | 1,2 |
| 550-2206 | 5300H5 | 1 | 559-0101-003 | 5100H1 | 1,2 |
| 550-2304 | 5381H7 | 1 | 559-0102-003 | 5102H1-5V | 1 |
| 550-2305 | 5380H7 | 1 | 559-0201-001 | 5101H5 | 1,2 |
| 550-2306 | 5300H7 | 1 | 559-0201-003 | 5100H5 | 1,2 |
| 550-2404 | 5381H1 | 1 | 559-0202-003 | 5102H5-5V | 1 |
| 550-2405 | 5380H1 | 1 | 559-0301-001 | 5101H7 | 1,2 |
| 550-2406 | 5300H1 | 1 | 559-0301-003 | 5100H7 | 1,2 |
| 550-3006 | 5300H1/5 | 1 | 559-0302-003 | 5102H3-5V | 1 |
| | | | 559-2101-001 | 5101H1 | 1 |
| 551-0205 | 5600F5 | 1,2 | 559-2101-003 | 5100H1 | 1 |
| 551-0305 | 5600F7 | 1,2 | 559-2201-001 | 5101H5 | 1 |
| 551-0405 | 5600F1 | 1,2 | 559-2201-003 | 5100H5 | 1 |
| 551-0505 | 5602F1-5V | 1,2 | 559-2301-001 | 5100H7 | 1 |
| | | | 559-2301-003 | 5100H7 | 1 |
| 555-2001 | 5350T1 | 1,2 | 559-3001-003 | 5100H1/5 | 1 |
| 555-2004 | 5352T1-5V | 1,2 | | | |
| 555-2301 | 5350T5 | 1,2 | 81-1059-01-102 | 2803 | 1 |
| 555-2401 | 5350T7 | 1 | | | |

**NOTES:**

1. Minor physical difference
2. IDI is brighter
3. Minor viewing angle difference
5. Comp-Chrm, IDI-Wht

CROSS REFERENCE

# IDI CROSS REFERENCE

## GI LAMP — CHICAGO MINIATURE

| GI Lamp—Chi Model | IDI Model # | Notes |
|---|---|---|
| 1-603 Red | 2222C1-2E | 1 |
| 1-803 Red | 2222A1-2E | 1 |
| 105-025 Red | 1050A1 | 1 |
| 11-604 Red | 2222B1-2B | 1 |
| 116A | SN1287 | 1 |
| 12-604 Red | 2222B1-6A | 1 |
| 13-604 Red | 2222B1-6.3C | 1 |
| 14-604 Red | 2222B1-14A | 1 |
| 15-604 Red | 2222B1-28B | 1 |
| 16-604 Red | 2222B1-6.3B | 1 |
| 17-604 Red | 2222B1-28 | 1 |
| 25P-306 Red | 2811 | 3 |
| 25P-307 Red | 2811 | 3 |
| 25P-326 Amber | 2813 | |
| 25P-326 Clear | 2812 | |
| 25P-326 Green | 2815 | |
| 25P-326 Red | 2811 | |
| 25P-606 Red | 2841 | |
| 25P-607 Red | 2841 | 3 |
| 25P-626 Red | 2851 | |
| 399-058 | 2212LC | 1 |
| 4-603 Red | 2222C1-2H | 1 |
| 4428-001 | 2210 | 1 |
| 4438-001 | 2211-22K | 1 |
| 4438-003 | 2211-47K | 1 |
| 4438-005 | 2211-56K | 1 |
| 4438-007 | 2211-100K | 1 |
| 4772 | 4110 | |
| 4777 | 4100 | 1 |
| 4779-002 | 4130 | 1 |
| 5100-184-326 Red | 2803 + 2811 | 1 |
| 5200-222-326 Red | 2803 + 2811 | 1 |
| 5201-492-326 | 2803 + 2811 | 1 |
| 6-604 Red | 2222B1-6 | 1 |
| 6047-001-707 Red | 2990D1-12V | 1 |
| 6063-005-534 | 2112QA5 | 1 |
| 6073-000-534 Amber | 1030QD3 | 1 |
| 6073-000-534 Red | 1030QD1 | 1 |
| 6073-000-534 White | 1030QD4 | 1 |
| 6073-000-634 Red | 1050QC1 | 1 |
| 6073-001-534 Red | 1030D1 | 1 |
| 6073-001-634 Red | 1050C1 | 1 |
| 6082-002-304 | 2191U1-6V | 1 |
| 6082-004-304 | 2191U7-6V | 1 |
| 6082-005-304 | 2191U5-6V | 1 |
| 6234-001-596 Red | 1050C1 | 1 |
| 6293-000-184 Amber | 1030QD3 | 1 |
| 6293-000-184 Green | 1032QD5 | 1 |
| 6293-000-184 Red | 1030QD1 | 1 |
| 6293-000-184 White | 1030QD4 | 1 |
| 6293-003-184 Green | 1032D5 | 1 |
| 6293-003-184 Red | 1030D1 | 1 |
| 6295-000-184 Green | 1033QD5 | 1 |
| 6295-000-184 Red | 1031QD1 | 1 |
| 6295-003-184 Green | 1033D5 | 1 |
| 6295-003-184 Red | 1031D1 | 1 |
| 6342-001-505A | 1091GM1-6V | 1 |
| 6342-002-505R | 1091GM1-6V | 1 |
| 6342-301-505A | 1091M7-6V | 1 |
| 6342-302-505R | 1091M1-6V | 1 |
| 6344-001-505A | 1091GM7-12V | 1 |
| 6344-002-505R | 1091GM1-12V | 1 |
| 6344-301-505A | 1091M7-12V | 1 |
| 6344-302-505R | 1091M1-12V | 1 |
| 6346-001-505A | 1091GM7-24V | 1 |
| 6346-002-505R | 1091GM1-24V | 1 |
| 6346-301-505A | 1091M7-24V | 1 |
| 6346-302-505R | 1091M1-24V | 1 |
| 6386-001-607 Amber | 2194A3-6V | 1 |
| 6386-001-607 Green | 2194A5-6V | 1 |
| 6386-001-607 Red | 2194A1-6V | 1 |
| 6386-001-607 White | 2194A4-6V | 1 |
| 6387-001-607 Green | 2194A5-12V | 1 |
| 6387-001-607 Red | 2194A1-12V | 1 |
| 6388-001-607 Green | 2194A5-28V | 1 |
| 6388-001-607 Red | 2194A1-28V | 1 |
| 6396-001-507 Red | 2195A1-6V | 1 |
| 6396-001-607 Red | 2194A1-6V | 1 |
| 6397-001-507 Red | 2195A1-12V | 1 |
| 6397-001-607 Red | 2194A1-12V | 1 |
| 6398-001-507 Red | 2195A1-28V | 1 |
| 6398-001-607 Red | 2194A1-28V | 1 |
| 6483-401-603 Amber | 2150A3 | 1 |
| 6483-401-603 Clear | 2150A2 | 1 |
| 6483-401-603 Red | 2150A1 | 1 |
| 6493-001-583 Red | 2110A1 | 1 |
| 6493-003-583 | 2110A3 | 1 |
| 6493-005-583 | 2112A5 | 1 |

**NOTES:**

1. Minor physical difference
3. Minor viewing angle difference

# IDI CROSS REFERENCE

## GI LAMP — CHICAGO MINIATURE

| GI Lamp—Chi Model | IDI Model # | Notes |
|---|---|---|
| 6493-405-603 | 2152A5 | 1 |
| 7-603 Red | 2222B4-10 | 1 |
| 763 | SN1220 | |
| 9-604 Red | 2222B1-14 | 1 |
| CM4-244B | 4303F1 | |
| CM4-282B | 4305H1 | |
| CM4-282B-2 | 4305H1 | 3 |
| CM4-283B | 4305H1 | 2,3 |
| CM4-284B | 4304H1 | |
| CM4-284B-2 | 4304H1 | 3 |
| CM4-344A | 4303F5 | 2 |
| CM4-344B | 4303F5 | 1,2 |
| CM4-382B | 4305H5 | 2 |
| CM4-382B-2 | 4305H5 | 3 |
| CM4-383B | 4305H5 | 2 |
| CM4-384B | 4305H5 | 2 |
| CM4-384B-2 | 4305H5 | 3 |
| CM4-43A | 4303F1 | 2 |
| CM4-43B | 4303F1 | 1,2 |
| CM4-544A | 4303F7 | |
| CM4-544B | 4303F7 | 1 |
| CM4-582B | 4305H7 | |
| CM4-582B-2 | 4305H7 | 3 |
| CM4-583B | 4305H7 | 2,3 |
| CM4-584B | 4304H7 | |
| CM4-584B-2 | 4304H7 | 3 |
| CM4-6B | 4304MC | |
| CM4-73A | 4300S1 | |
| CM4-80B | 4304H1 | 2,3 |
| CM4-81B | 4304H1 | 2,3 |
| CM4-82B | 4304H1 | 2,3 |
| CM4-84B | 4304H1 | 2,3 |
| CM4-84B-1 | 4304H1 | 2,3 |
| CM4-84B-2 | 4304H1 | 2,3 |
| CM4-85B | 4304H1 | 2,3 |
| CM4-86B | 4304H1 | 2,3 |
| CM44-11-001-1 | 2222X1-S1-5 | 1 |
| CM44-11-011-3 | 2222X3-S3-5 | 1 |
| CM44-11-036-2 | 2222X5-S5-5 | 1 |
| CMB5352(4-582B) | 4305H7 | |
| CMB5353(4-584B) | 4304H7 | |
| CMD269 | 4306R1 | |
| CMD369 | 4306R5 | |
| CMD50 | 4307T1 | 1,2,3 |
| CMD52 | 4307T7 | 1,2 |
| CMD5274C | 4303F5 | 1,2 |
| CMD53 | 4307T5 | 1,2 |
| CMD5352(4-582B) | 4305H7 | |
| CMD5353(4-584B) | 4304H7 | |
| CMD5374C | 4303F7 | 1,2 |
| CMD54 | 4307T1 | 1,2 |
| CMD5491 | 4301H1/5 | 1,2 |
| CMD569 | 4306R7 | |
| CMD5752(4-282B) | 4305H1 | |
| CMD5753(4-204B) | 4304H1 | |
| CMD5774C | 4303F1 | 1,2 |
| CMD64520 | 4305H5 | 2 |
| CMD64521 | 4305H5 | |
| CMD64530 | 4304H5 | |
| CML-10380 | SN1220 | |
| CML10-202-1 | 2210 | 1 |
| CML10-203-1 | 2210 | 1 |
| CML10-204-1 | 2210 | |
| CML21-3 | 2212LC | |
| CML53-008-1 | 2222K1-10A | 1 |
| CML53-008-2 | 2222K5-10A | 1 |
| CML53-008-3 | 2222K3-10A | 1 |
| CML53-008-7 | 2222K2-10A | 1 |
| CML53-013-1 | 2222K1-6.3 | 1 |
| CML54-008-1 | 2222K11-10A | 1 |
| CML54-013-1 | 2222K11-6.3 | 1 |
| CML54-013-2 | 2222K15-6.3 | 1 |
| CML54-013-5 | 2222K14-6.3 | 1 |
| CML54-013-6 | 2222K17-6.3 | 1 |
| CML54-027-1 | 2222K11-6.3 | 1 |
| CML54-027-2 | 2222K15-6.3 | 1 |
| CML54-027-3 | 2222K13-6.3 | 1 |
| CML54-027-4 | 2222K16-6.3 | 1 |
| CML54-027-5 | 2222K14-6.3 | 1 |
| CML54-027-6 | 2222K17-6.3 | 1 |
| CML54-028-1 | 2222K11-14A | 1 |
| CML54-028-2 | 2222K15-14A | 1 |
| CML54-028-5 | 2222K14-14A | 1 |
| CML54-028-6 | 2222K17-14A | 1 |
| CML54-029-1 | 2222K11-28A | 1 |
| CML54-029-2 | 2222K15-28A | 1 |
| CML54-029-5 | 2222K14-28A | 1 |
| CML54-029-6 | 2222K17-28A | 1 |
| CML63-008-1 | 2222B1-10A | 1 |
| CML63-008-2 | 2222B5-10A | 1 |
| CML63-008-3 | 2222B3-10A | 1 |
| CML63-008-7 | 2222B2-10A | 1 |
| CML63-013-1 | 2222B1-6.3 | 1 |
| CML64-008-1 | 2222B11-10A | 1 |
| CML64-011-1 | 2222B11-28 | 1 |
| CML64-013-1 | 2222B11-6.3 | 1 |

**NOTES:**

1. Minor physical difference 2. IDI is brighter 3. Minor viewing angle difference

# IDI CROSS REFERENCE

## GI LAMP — CHICAGO MINIATURE

| GI Lamp—Chi Model | IDI Model # | Notes | GI Lamp—Chi Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| CML64-013-2 | 2222B15-6.3 | 1 | CML64-028-6 | 2222B17-14A | 1 |
| CML64-013-5 | 2222B14-6.3 | 1 | CML64-029-1 | 2222B11-28A | 1 |
| CML64-013-6 | 2222B17-6.3 | 1 | CML64-029-2 | 2222B15-28A | 1 |
| CML64-027-1 | 2222B11-6.3 | 1 | CML64-029-5 | 2222B14-28A | 1 |
| CML64-028-1 | 2222B11-14A | 1 | CML64-029-6 | 2222B17-28A | 1 |
| CML64-028-2 | 2222B15-14A | 1 | CMP52(4-6B) | 4304MC | |
| CML64-028-5 | 2222B14-14A | 1 | | | |

**NOTES:**
1. Minor physical difference

# IDI CROSS REFERENCE

## GI OPTO

| GI Opto Model | IDI Model # | Notes | IDI Model # | Notes | IDI Model # | Notes |
|---|---|---|---|---|---|---|
| MP52 | 4304MC | | MV5254 | | 4305H5 | 2 |
| | | | MV5274C | | 4303F5 | 2 |
| MV50 | 4307T1 | 1,2 | MV53 | | 4307T7 | 1,2 |
| MV50154 | 4300S1 | 1 | MV53124 | | 4306R7 | 1,3 |
| MV5020 | 4304H1 | 1,2,3 | MV53134 | | 4304S7 | |
| MV5021 | 4304H1 | 1,2,3 | MV53154 | | 4304S7 | |
| MV5022 | 4304H1 | 1,2,3 | MV5352 | | 4305H7 | |
| MV5023 | 4304H1 | 1,2,3 | MV5353 | | 4304H7 | |
| MV5024 | 4304H1 | 1,2 | MV5354 | | 4305H7 | 2 |
| MV5025 | 4304H1 | 1,2,3 | MV53641 | | 4303F7 | |
| MV5026 | 4304H1 | 1,2,3 | MV5374C | | 4303F7 | |
| MV5050 | 4304H1 | 2,3 | MV54 | | 4307T1 | 1,2 |
| MV5051 | 4304H1 | 2,3 | MV54154 | | 4304S5 | |
| MV5052 | 4304H1 | 2,3 | MV54643 | | 4303F5 | |
| MV5053 | 4300E1 | | MV5491 | | 4301H1/5 | 1,2 |
| MV5055 | 4304H1 | 2,3 | MV57154 | | 4304S1 | |
| MV5056 | 4304H1 | 2,3 | MV5752 | | 4305H1 | |
| MV5074C | 4303F1 | 2 | MV5753 | | 4304H1 | |
| MV5075C | 4303F1 | 2 | MV5754 | | 4305H1 | 2 |
| MV5094 | 4304H1 | 1,2 | MV57641 | | 4303F1 | |
| MV51124 | 4306R1 | 1,3 | MV60538 | | 4300E1NF | |
| | | | MV63538 | | 4300E7NF | |
| MV52 | 4307T5 | 1,2 | MV64520 | | 4305H5 | |
| MV52124 | 4306R5 | 1,3 | MV64521 | | 4305H5 | |
| MV52154 | 4304S5 | | MV64530 | | 4304H5 | |
| MV5252 | 4305H5 | 2 | MV64531 | | 4304H5 | |
| MV5253 | 4305H5 | 2 | MV64538 | | 4300E5NF | |

**NOTES:**

1. Minor physical difference
2. IDI is brighter
3. Minor viewing angle difference

CROSS REFERENCE

# IDI CROSS REFERENCE

## HP OPTO

| H/P Opto Model | IDI Model # | Notes | H/P Opto Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| 5082-4100 | 4307T1 | 2 | HLMP-0401 | 4306R7 | |
| 5082-4101 | 4307T1 | 2 | HLMP-0503 | 4306R5 | |
| 5082-4150 | 4307T7 | | HLMP-1000 | 4300F1 | |
| 5082-4160 | 4307T1 | | HLMP-1100 | 4302F1-5V | |
| 5082-4190 | 4307T5 | | HLMP-1301 | 4303F1 | |
| 5082-4403 | 4304H1 | 1,2 | HLMP-1340 | 4308F1 | 1,2 |
| 5082-4440 | 4304H1 | 1,2 | HLMP-1401 | 4303F7 | 1 |
| 5082-4487 | 4300S1 | 1,2,3 | HLMP-1440 | 4308F7 | 1,2 |
| 5082-4488 | 4300S1 | 1,2,3 | HLMP-1503 | 4303F5 | |
| 5082-4550 | 4304H7 | 2 | HLMP-1540 | 4308F5 | 1,2 |
| 5082-4555 | 4304H7 | | HLMP-1700 | 4300F1LC | |
| 5082-4557 | 4305H7 | 2,3 | HLMP-1719 | 4300F7LC | |
| 5082-4558 | 4305H7 | 2,3 | HLMP-3300 | 4304H1 | 3 |
| 5082-4570 | 4306R7 | | HLMP-3315 | 4305H1 | |
| 5082-4584 | 4303F7 | | HLMP-3350 | 4304S1 | |
| 5082-4650 | 4304H1 | 2 | HLMP-3400 | 4304H7 | 3 |
| 5082-4655 | 4304H1 | | HLMP-3415 | 4305H7 | 3 |
| 5082-4657 | 4305H1 | 2,3 | HLMP-3450 | 4304S7 | |
| 5082-4658 | 4305H1 | | HLMP-3502 | 4304H5 | |
| 5082-4670 | 4306R1 | 3 | HLMP-3517 | 4305H5 | |
| 5082-4684 | 4303F1 | | HLMP-3600 | 4302H1-5V | |
| 5082-4707 | 4304MC | | HLMP-3650 | 4302H3-5V | |
| 5082-4790 | 4300S1 | 1 | HLMP-3680 | 4302H5-5V | |
| 5082-4791 | 4300S1 | 1,3 | HLMP-3750 | 4308H1 | 2 |
| 5082-4850 | 4304H1 | 1,2 | HLMP-3850 | 4308H7 | 2 |
| 5082-4855 | 4304H1 | 1,2 | HLMP-3950 | 4308H5 | 2 |
| 5082-4880 | 4304H1 | 1,2 | HLMP-4600 | 4304H1 | |
| 5082-4881 | 4304H1 | 1,2 | HLMP-4700 | 4300H1LC | |
| 5082-4882 | 4304H1 | 1,2 | HLMP-4719 | 4300H7LC | |
| 5082-4883 | 4304H1 | 1,2,3 | HLMP-5000 | 5300E1 | 1 |
| 5082-4884 | 4304H1 | 1,2,3 | HLMP-5005 | 5302H1-V5 | 1,2 |
| 5082-4885 | 4304H1 | 1,2,3 | HLMP-5030 | 5300H1 | 1 |
| 5082-4886 | 4304H1 | 1,2,3 | HLMP-5040 | 5300H7 | 1 |
| 5082-4887 | 4304H1 | 1,2,3 | HLMP-5050 | 5300H5 | 1 |
| 5082-4888 | 4304H1 | 1,2,3 | HLMP-5060 | 5302H1-5V | 1 |
| 5082-4950 | 4304H5 | 2 | HLMP-5070 | 5302H3-5V | 1 |
| 5082-4955 | 4304H5 | | HLMP-5080 | 5302H5-5V | 1 |
| 5082-4957 | 4305H5 | | HLMP-6300 | 4307T7 | |
| 5082-4958 | 4305H5 | | HLMP-6400 | 4307T7 | |
| 5082-4970 | 4306R5 | | HLMP-6500 | 4307T5 | |
| 5082-4984 | 4303F5 | | HLMP-6600 | 4302T1-5V | |
| | | | HLMP-7000 | 4300T1LC | |
| HLMP-0103 | 4304MC | | HLMP-7019 | 4300T7LC | |
| HLMP-0301 | 4306R1 | | | | |

**NOTES:**

1. Minor physical difference
2. IDI is brighter
3. Minor viewing angle difference

# IDI CROSS REFERENCE

## INTERNATIONAL DEVICES

| International Model | IDI Model # | Notes | International Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| ID124-Q | 4303F5 | 1,2 | ID5501-UQ | 4308H5 | 1,2 |
| ID124-R | 4303F1 | 1,2 | ID5501-UR | 4308H1 | 1,2 |
| ID124-Y | 4303F7 | 1,2 | ID5501-UY | 4308H7 | 1,2 |
| ID50154 | 4300S1 | 2 | ID56154 | 4304S1 | 2 |
| ID52154 | 4304S5 | 2 | ID5721 | 4300E5NF | 1,2 |
| ID5252 | 4304H5 | 1,2 | ID5731 | 4300E7NF | 1,2 |
| ID5253 | 4305H5 | 1,2 | ID5741 | 4300E1NF | 1,2 |
| ID53154 | 4304S7 | 2 | ID5752 | 4305H1 | 1,2 |
| ID5352 | 4304H7 | 1,2 | ID5753 | 4304H1 | 1,2 |
| ID5353 | 4305H7 | 1,2 | | | |

**NOTES:**

1. Minor physical difference
2. IDI is brighter

CROSS REFERENCE

# IDI CROSS REFERENCE

## LEECRAFT

| Leecraft Model | IDI Model # | Notes | Leecraft Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| 31-2111 | 2330D1 | 1 | 32Q18-2115 | 1090C4-28V | 1,4 |
| 31-2111T | 2330QD1 | 1 | 32Q18-2211 | 1090A1-28V | 1,4 |
| 31-2113 | 2330D3 | 1 | 32Q18-2212 | 1090A5-28V | 1,4 |
| 31-2113T | 2330QD3 | 1 | 32Q18-2213 | 1090A3-28V | 1,4 |
| 31-2115 | 2330D4 | 1 | 32Q18-2214 | 1090A6-28V | 1,4 |
| 31-2115T | 2330QD4 | 1 | 32Q18-2215 | 1090A4-28V | 1,4 |
| 31-2215 | 2330D4 | 1 | 32Q18-2311 | 1090D1-28V | 1,4 |
| | | | 32Q18-2312 | 1090D5-28V | 1,4 |
| 32-2111 | 1050C1 | 1,4 | 32Q18-2313 | 1090D3-28V | 1,4 |
| 32-2111T | 1050QC1 | 1,4 | 32Q18-2315 | 1090D4-28V | 1,4 |
| 32-2112 | 1052C5 | 1,4 | 32Q3-2111 | 1090C1-12V | 1,4 |
| 32-2112T | 1052QC5 | 1,4 | 32Q3-2112 | 1090C5-12V | 1,4 |
| 32-2113 | 1050C3 | 1,4 | 32Q3-2113 | 1090C3-12V | 1,4 |
| 32-2113T | 1050QC3 | 1,4 | 32Q3-2115 | 1090C4-12V | 1,4 |
| 32-2115 | 1050C4 | 1,4 | 32Q3-2211 | 1090A1-12V | 1,4 |
| 32-2115T | 1050QC4 | 1,4 | 32Q3-2212 | 1090A5-12V | 1,4 |
| 32-211T | 1050QC1 | 1,4 | 32Q3-2213 | 1090A3-12V | 1,4 |
| 32-2211 | 1050A1 | 1,4 | 32Q3-2214 | 1090A6-12V | 1,4 |
| 32-2211T | 1050QA1 | 1,4 | 32Q3-2215 | 1090A4-12V | 1,4 |
| 32-2212 | 1052A5 | 1,4 | 32Q3-2311 | 1090D1-12V | 1,4 |
| 32-2212T | 1052QA5 | 1,4 | 32Q3-2312 | 1090D5-12V | 1,4 |
| 32-2213 | 1050A3 | 1,4 | 32Q3-2313 | 1090D3-12V | 1,4 |
| 32-2213T | 1050QA3 | 1,4 | 32Q3-2315 | 1090D4-12V | 1,4 |
| 32-2215 | 1050A4 | 1,4 | 32Q5-2111 | 1090C1-28V | 1,4 |
| 32-2215T | 1050QA4 | 1,4 | 32Q5-2112 | 1090C5-28V | 1,4 |
| 32-2217 | 1050A2 | 1,4 | 32Q5-2113 | 1090C3-28V | 1,4 |
| 32-2311 | 1030D1 | 1,4 | 32Q5-2115 | 1090C4-28V | 1,4 |
| 32-2311T | 1030QD1 | 1,4 | 32Q5-2211 | 1090A1-28V | 1,4 |
| 32-2312 | 1032D5 | 1,4 | 32Q5-2212 | 1090A5-28V | 1,4 |
| 32-2312T | 1032QD5 | 1,4 | 32Q5-2213 | 1090A3-28V | 1,4 |
| 32-2313 | 1030D3 | 1,4 | 32Q5-2214 | 1090A6-28V | 1,4 |
| 32-2313T | 1030QD3 | 1,4 | 32Q5-2215 | 1090A4-28V | 1,4 |
| 32-2315 | 1030D4 | 1,4 | 32Q5-2311 | 1090D1-28V | 1,4 |
| 32-2315T | 1030QD4 | 1,4 | 32Q5-2312 | 1090D5-28V | 1,4 |
| | | | 32Q5-2313 | 1090D3-28V | 1,4 |
| 32Q1-2111 | 1090C1-6V | 1,4 | 32Q5-2315 | 1090D4-28V | 1,4 |
| 32Q1-2112 | 1090C5-6V | 1,4 | | | |
| 32Q1-2113 | 1090C3-6V | 1,4 | 32R-2111 | 1050C1 | 1 |
| 32Q1-2114 | 1090C6-6V | 1,4 | 32R-2111T | 1050QC1 | 1 |
| 32Q1-2115 | 1090C4-6V | 1,4 | 32R-2112 | 1052C5 | 1 |
| 32Q1-2211 | 1090A1-6V | 1,4 | 32R-2112T | 1052QC5 | 1 |
| 32Q1-2212 | 1090A5-6V | 1,4 | 32R-2113 | 1050C3 | 1 |
| 32Q1-2213 | 1090A3-6V | 1,4 | 32R-2113T | 1050QC3 | 1 |
| 32Q1-2214 | 1090A6-6V | 1,4 | 32R-2115 | 1050C4 | 1 |
| 32Q1-2215 | 1090A4-6V | 1,4 | 32R-2115T | 1050QC4 | 1 |
| 32Q1-2311 | 1090D1-6V | 1,4 | 32R-2117 | 1050C2 | 1 |
| 32Q1-2312 | 1090D5-6V | 1,4 | 32R-2211 | 1050A1 | 1 |
| 32Q1-2313 | 1090D3-6V | 1,4 | 32R-2211T | 1050QA1 | 1 |
| 32Q1-2315 | 1090D4-6V | 1,4 | 32R-2212 | 1052A5 | 1 |
| 32Q18-2111 | 1090C1-28V | 1,4 | 32R-2212T | 1052QA5 | 1 |
| 32Q18-2112 | 1090C5-28V | 1,4 | 32R-2213 | 1050A3 | 1 |
| 32Q18-2113 | 1090C3-28V | 1,4 | 32R-2213T | 1050QA3 | 1 |

**NOTES:**

1. Minor physical difference
4. Comp-Wht, IDI-Chrm

# IDI CROSS REFERENCE

## LEECRAFT

| Leecraft Model | IDI Model # | Notes | Leecraft Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| 32R-2215 | 1050A4 | 1 | 35-2111 | 1051C1 | 1,4 |
| 32R-2215T | 1050QA4 | 1 | 35-2111T | 1051QC1 | 1,4 |
| 32R-2217 | 1050A2 | 1 | 35-2211 | 1051A1 | 1,4 |
| 32R-2311 | 1030D1 | 1 | 35-2211T | 1051QA1 | 1,4 |
| 32R-2311T | 1030QD1 | 1 | 35-2311 | 1031D1 | 1,4 |
| 32R-2312 | 1032D5 | 1 | 35-2311T | 1031QD1 | 1,4 |
| 32R-2312T | 1032QD5 | 1 | 35R-2111 | 1051C1 | 1 |
| 32R-2313 | 1030D3 | 1 | 35R-2111T | 1051QC1 | 1 |
| 32R-2313T | 1030QD3 | 1 | 35R-2211 | 1051A1 | 1 |
| 32R-2315 | 1030D4 | 1 | 35R-2211T | 1051QA1 | 1 |
| 32R-2315T | 1030QD4 | 1 | 35R-2311 | 1031D1 | 1 |
| 32R-2911 | 1050N1 | 1 | 35R-2311T | 1031QD1 | 1 |
| 32R-2911T | 1050QN1 | 1 | | | |
| 32R-2912 | 1052N5 | 1 | 36EN-2111 | 2150A1 | 1 |
| 32R-2912T | 1052QN5 | 1 | 36EN-2112 | 2152A5 | 1 |
| 32R-2913 | 1050N3 | 1 | 36EN-2113 | 2150A3 | 1 |
| 32R-2913T | 1050QN3 | 1 | 36EN-2115 | 2150A4 | 1 |
| 32R-2915 | 1050N4 | 1 | 36EN-2311 | 2120A1 | 1,5 |
| 32R-2915T | 1050QN4 | 1 | | | |
| 32R-2917 | 1050N2 | 1 | 36N-2111 | 2150A1 | 1,4 |
| | | | 36N-2311 | 2110A1 | 1 |
| 32RQ-2111 | 1090C1-12V | 1 | 36N-2312 | 2112A5 | 1 |
| 32RQ1-2111 | 1090C1-6V | 1 | 36N-2313 | 2110A3 | 1 |
| 32RQ1-2112 | 1090C5-6V | 1 | 36N-2315 | 2110A4 | 1 |
| 32RQ1-2113 | 1090C3-6V | 1 | 36N-2317 | 2110A2 | 1 |
| 32RQ1-2114 | 1090C6-6V | 1 | | | |
| 32RQ1-2115 | 1090C4-6V | 1 | 36UHN-2311 | 2121A1 | 1 |
| 32RQ1-2211 | 1090A4-6V | 1 | 36UHRN-2311 | 2121A1 | 1,5 |
| 32RQ1-2311 | 1090D1-6V | 1 | 36UN-1311 | 2120A1 | 1,6 |
| 32RQ1-2312 | 1090D5-6V | 1 | 36UN-2311 | 2120A1 | 1 |
| 32RQ1-2313 | 1090D3-6V | 1 | 36UN-2313 | 2120A3 | 1 |
| 32RQ1-2314 | 1090D6-6V | 1 | 36UN-2315 | 2120A4 | 1 |
| 32RQ1-2315 | 1090D4-6V | 1 | 36URN-2311 | 2120A1 | 1,5 |
| 32RQ1-2911 | 1090N1-6V | 1 | | | |
| 32RQ18-2111 | 1090C1-28V | 1 | 39U-2111 | 2150A1 | 1,4 |
| 32RQ18-2211 | 1090A1-28V | 1 | 39UQ1-2111 | 2194A1-6V | 1,4 |
| 32RQ18-2311 | 1090D1-28V | 1 | 39UQ18-2111 | 2194A1-28V | 1,4 |
| 32RQ18-2911 | 1090N1-28V | 1 | 39UQ3-2111 | 2194A1-12V | 1,4 |
| | | | 39UQ5-2111 | 2194A1-28V | 1,4 |
| 32RQ3-2111 | 1090C1-12V | 1 | 39UR-2111 | 2150A1 | 1 |
| 32RQ3-2112 | 1090C5-12V | 1 | 39UR-2112 | 2152A5 | 1 |
| 32RQ3-2113 | 1090C3-12V | 1 | 39UR-2113 | 2150A3 | 1 |
| 32RQ3-2114 | 1090C6-12V | 1 | 39UR-2115 | 2150A4 | 1 |
| 32RQ3-2115 | 1090C4-12V | 1 | 39UR-2117 | 2150A2 | 1 |
| 32RQ3-2211 | 1090A1-12V | 1 | 39URQ1-2111 | 2194A1-6V | 1 |
| 32RQ3-2311 | 1090D1-12V | 1 | 39URQ18-2111 | 2194A1-28V | 1 |
| 32RQ3-2911 | 1090N1-12V | 1 | 39URQ3-2111 | 2194A1-12V | 1 |
| | | | 39URQ5-2111 | 2194A1-28V | 1 |
| 32RQ5-2111 | 1090C1-28V | 1 | | | |
| 32RQ5-2211 | 1090A1-28V | 1 | 41NQ1-1311 | 2195A1-6V | 1,6 |
| 32RQ5-2311 | 1090D1-28V | 1 | 41NQ3-1311 | 2195A1-12V | 1,6 |
| 32RQ5-2911 | 1090N1-28V | 1 | | | |

**NOTES:** 1. Minor physical difference
4. Comp-Wht, IDI-Chrm
5. Comp-Chrm, IDI-Wht
6. Comp-Blk, IDI-Wht

# IDI CROSS REFERENCE

## LEECRAFT

| Leecraft Model | IDI Model # | Notes |
|---|---|---|
| 45RN-2111 | 2150QA1 | 1 |
| 45RN-2112 | 2152QA5 | 1 |
| 45RN-2113 | 2150QA3 | 1 |
| 45RN-2115 | 2150QA4 | 1 |
| 45RNQ3-2111 | 2194QA1-12V | 1 |
| 45RNQ5-2111 | 2194QA1-28V | 1 |
| 48-2 | 3620D4 | 1 |
| 48-2T | 3620QD4 | 1 |
| 48-3 | 3620D1 | 1 |
| 48-3T | 3620QD1 | 1 |
| 48-4 | 3622D5 | 1 |
| 48-4T | 3622QD5 | 1 |
| 48-9 | 3620D3 | 1 |
| 48-9T | 3620QD3 | 1 |
| 53-07 | 4110 | |
| 53-207 | 4120 | 1 |
| 53-35 | 4141 | 1 |
| 62-0131 | 4700A1 | 1 |
| 62-0132 | 4702A5 | 1 |
| 62-0133 | 4700A3 | 1 |
| 62-0135 | 4700A4 | 1 |
| 65Q1-0131 | 2990D1-6V | 1 |
| 65Q3-0131 | 2990D1-28V | 1 |
| 65Q5-0131 | 2990D1-28V | 1 |
| 69-35 | 4130 | 1 |
| L101DRG | 4301H1/5 | 1 |
| L111CQ | 4305H5 | |
| L111CR | 4305H1 | |
| L111CY | 4305H7 | |
| L111DQ | 4304H5 | |
| L111DQ-5V | 4302H5-5V | 1 |
| L111DR | 4304H1 | 2 |
| L111DRG | 4301H1/5 | 1 |
| L111DY | 4304H7 | |
| L111DY-5V | 4302H3-5V | 1 |
| L121CQ | 4308H5 | 1,2 |
| L121CR | 4308H1 | 1,2 |
| L121CY | 4308H7 | 1,2 |
| L121DG | 4304H5 | 1 |
| L121DR | 4304H1 | 1 |
| L121DY | 4304H7 | 1 |
| L131DR | 4300H1LC | 1 |
| L131DY | 4300H7LC | 1 |
| L210DRQ | 4301H1/5 | 1 |
| L311DQ | 4303F5 | 1,2 |
| L311DR | 4303F1 | 1,2 |
| L311DY | 4304F7 | 1,2 |
| L321DG | 4303F5 | 1 |
| L321DR | 4303F1 | 1 |
| L321DY | 4303F7 | 1 |
| L32R-Q12-2212 | 1091M5-12V | 1 |
| L32R-Q12-2212T | 1091QM5-12V | 1 |
| L32R-Q24-2212 | 1091M5-24V | 1 |
| L32R-Q24-2212T | 1091QM5-24V | 1 |
| L32R-Q6-2212 | 1091M5-6V | 1 |
| L32R-R12-2211 | 1091M1-12V | 1 |
| L32R-R12-2211T | 1091QM1-12V | 1 |
| L32R-R24-2211 | 1091M1-24V | 1 |
| L32R-R24-2211T | 1091QM1-24V | 1 |
| L32R-R6-2211 | 1091M1-6V | 1 |
| L32R-Y12-2116T | 1091QM7-12V | 1 |
| L32R-Y12-2216 | 1091M7-12V | 1 |
| L32R-Y24-2116 | 1091M7-24V | 1 |
| L32R-Y24-2116T | 1091QM7-24V | 1 |
| L32R-Y6-2216 | 1091M7-6V | 1 |
| L39UR-Q12-2112 | 2191L5-12V | 1 |
| L39UR-Q24-2112 | 2191L5-24V | 1 |
| L39UR-Q6-2112 | 2191L5-6V | 1 |
| L39UR-R12-2111 | 2191L1-12V | 1 |
| L39UR-R24-2111 | 2191L1-24V | 1 |
| L39UR-R6-2111 | 2191L1-6V | 1 |
| L39UR-Y12-2116 | 2191L7-12V | 1 |
| L39UR-Y24-2116 | 2191L7-24V | 1 |
| L39UR-Y6-2116 | 2191L7-6V | 1 |
| L401DQ | 4307T5 | 1 |
| L401DR | 4307T1 | 1 |
| L401DY | 4307T7 | 1 |
| L411DR | 4307T1 | 1,2 |
| L411DG | 4307T5 | 1,2 |
| L411DY | 4307T7 | 1,2 |
| L45RN-Q12-2112 | 2191QL5-12V | 1 |
| L45RN-Q24-2112 | 2191QL5-24V | 1 |
| L45RN-Q6-2112 | 2191QL5-6V | 1 |
| L45RN-R12-2111 | 2191QL1-12V | 1 |
| L45RN-R24-2111 | 2191QL1-24V | 1 |
| L45RN-R6-2111 | 2191QL1-6V | 1 |
| L45RN-Y12-2116 | 2191QL7-12V | 1 |
| L45RN-Y24-2116 | 2191QL7-24V | 1 |
| L45RN-Y6-2116 | 2191QL7-6V | 1 |
| L511DR-5V | 4302H1-5V | 1 |
| L511DR | 4306R1 | 2 |
| L511DG | 4306R5 | 2 |

**NOTES:**

1. Minor physical difference
2. IDI is brighter

# IDI CROSS REFERENCE

## LEECRAFT

| Leecraft Model | IDI Model # | Notes | Leecraft Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| L511DY | 4306R7 | 2 | L31DY | 5300H7LC | 1 |
| L59D-R6-W | 5102H1-5V | 1 | L633DR | 5600F1LC | 1 |
| L59D-G6-W | 5102H5-5V | 1 | L633DY | 5600F7LC | 1 |
| L59-Q2-W | 5100H5 | 1 | | | |
| L59-R2-W | 5100H1 | 1 | L810Q | 4315 | |
| L59-Y2-W | 5100H7 | 1 | L810R | 4311 | |
| | | | L810WW | 4312 | |
| L611DQ | 5300H5 | 1,2 | L810Y | 4317 | |
| L611DR | 5300H1 | 1,2 | L811Q | 4325 | |
| L611DRG | 5300H1/5 | 1 | L811R | 4321 | |
| L611DY | 5300H7 | 1,2 | L811WW | 4322 | |
| L613DQ | 5600F5 | 1 | L811Y | 4327 | |
| L613DR | 5600F1 | 1 | L812Q | 4335 | |
| L613DY | 5600F7 | 1 | L812R | 4331 | |
| L614DR | 5350T1 | 1 | L812Y | 4337 | |
| L624DR-5V | 5352T1-5V | 1 | L820B | 4304MC | |
| L631DR | 5300H1LC | 1 | | | |

**NOTES:**

1. Minor physical difference
2. IDI is brighter

CROSS REFERENCE

# IDI CROSS REFERENCE

## LITTELFUSE

| Littelfuse Model | IDI Model # | Notes | Littelfuse Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| 271AN | 2233 | 1 | 961-870A-90WRN | 2330QD1 | 1 |
| 271BN | 2236 | 1 | 961-870A-90WWN | 2330QD4 | 1 |
| 271CN | 2232 | 1 | 961-8711-90WAN | 2331QD3 | 1 |
| 271QN | 2235 | 1 | 961-871T-90WRN | 2331QD1 | 1 |
| 271RN | 2231 | 1 | | | |
| 271YN | 2237 | 1 | 970-602X-92WAN | 2195A3-6V | 1 |
| | | | 970-602X-92WQN | 2195A5-6V | 1 |
| 730AD | 2853 | 1 | 970-602X-92WRN | 2195A1-6V | 1 |
| 730QD | 2855 | 1 | 970-602X-92WWN | 2195A4-6V | 1 |
| 730RD | 2851 | 1 | 970-603X-92WAN | 2195A3-12V | 1 |
| | | | 970-603X-92WQN | 2195A5-12V | 1 |
| 740AN | 2813 | | 970-603X-92WRN | 2195A1-12V | 1 |
| 740BN | 2816 | | 970-603X-92WWN | 2195A4-12V | 1 |
| 740CN | 2812 | | 970-604X-92WAN | 2195A3-28V | 1 |
| 740QN | 2815 | | 970-604X-92WQN | 2195A5-28V | 1 |
| 740RN | 2811 | | 970-604X-92WRN | 2195A1-28V | 1 |
| 74OWN | 2814 | | 970-604X-92WWN | 2195A4-28V | 1 |
| 74OYN | 2817 | | 970-656B-92WQN | 2112A5 | 1 |
| | | | 970-657B-92WBN | 2112A6 | 1 |
| 870-029-001 | SN1220 | | 970-670A-92WAN | 2110A3 | 1 |
| | | | 970-670A-92WCN | 2110A2 | 1 |
| 900-102X-082RT | 2222B11-6-3 | 1 | 970-670A-92WRN | 2110A1 | 1 |
| 900-103X-022QT | 2222K15-14A | 1 | 970-670A-92WWN | 2110A4 | 1 |
| 900-150X-032CN | 2222C2-2E | 1 | 970-956B-92WQN | 2112QA5 | 1 |
| 900-151X-012AN | 2222A3-2H | 1 | 970-957B-92WBN | 2112QA6 | 1 |
| 900-160X-061RN | 2222U1-S1 | 1 | 970-970A-92WAN | 2110QA3 | 1 |
| 900-166P-071QN | 2222X5-S5-6 | 1 | 970-970A-92WCN | 2110QA2 | 1 |
| 900-168N-061YN | 2222U7-S7-1 | 1 | 970-970A-92WRN | 2110QA1 | 1 |
| | | | 970-970A-92WWN | 2110QA4 | 1 |
| 910-411X | 2214 | 1 | | | |
| 910-411X-241XX | 2210 | 1 | 971-602X-03WRN | 2194A1-6V | 1 |
| 910000-010 | 2212LC | 1 | 971-656B-03WQN | 2152A5 | 1 |
| | | | 971-657B-03WBN | 2152A6 | 1 |
| 930-404X | 2802 | 1 | 971-660K-03WRN | 2191L1-24V | 1 |
| 930-405X | 2803 | 1 | 971-660K-06WRN | 2191U1-24V | 1 |
| | | | 971-660M-03WRN | 2191L1-6V | 1 |
| 961-656B-90WQN | 2332D5 | 1 | 971-660M-06WRN | 2191U1-6V | 1 |
| 961-656E-90WQN | 2333D5 | 1 | 971-660Z-03WRN | 2191L1-12V | 1 |
| 961-657B-90WBN | 2332D6 | 1 | 971-660Z-06WRN | 2191U1-12V | 1 |
| 961-657E-90WBN | 2333D6 | 1 | 971-666K-03WQN | 2191L5-24V | 1 |
| 961-670A-90WAN | 2330D3 | 1 | 971-666K-06WQN | 2191U5-24V | 1 |
| 961-670A-90WRN | 2330D1 | 1 | 971-666M-03WQN | 2191L5-6V | 1 |
| 961-670A-90WWN | 2330D4 | 1 | 971-666M-06WQM | 2191U5-6V | 1 |
| 961-671T-90WAN | 2331D3 | 1 | 971-666Z-03WQN | 2191L5-12V | 1 |
| 961-671T-90WRN | 2331D1 | 1 | 971-666Z-06WQN | 2191U5-12V | 1 |
| 961-804X-90WAN | 2390QD3-28V | 1 | 971-668K-03WYN | 2191L7-24V | 1 |
| 961-804X-90WQN | 2390QD5-28V | 1 | 971-668K-06WYN | 2191U7-24V | 1 |
| 961-804X-90WRN | 2390QD1-28V | 1 | 971-668M-03WYN | 2191L7-6V | 1 |
| 961-804X-90WWN | 2390QD4-28V | 1 | 971-668M-06WYN | 2191U7-6V | 1 |
| 961-856B-90WQN | 2332D5 | 1 | 971-668Z-03WYN | 2191L7-12V | 1 |
| 961-857B-90WBN | 2332QD6 | 1 | 971-668Z-06WYN | 2191U7-12V | 1 |
| 961-870A-90WAN | 2330QD3 | 1 | 971-670A-03WAN | 2150A3 | 1 |

**NOTES:**

1. Minor physical difference

Industrial Devices, Inc., Edgewater, NJ 07020 • (201) 224-4700 Telex: 127459 Fax: 201 224 9095

# IDI CROSS REFERENCE

## LITTELFUSE

| Littelfuse Model | IDI Model # | Notes | Littelfuse Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| 971-670A-03WCN | 2150A2 | 1 | 981-604X-96WAN | 1090C3-28V | 1 |
| 971-670A-03WRN | 2150A1 | 1 | 981-604X-96WQN | 1090C5-28V | 1 |
| 971-670A-03WWN | 2150A4 | 1 | 981-604X-96WRN | 1090C1-28V | 1 |
| 971-960K-03WRN | 2191QL1-24V | 1 | 981-604X-96WWN | 1090C4-28V | 1 |
| 971-960K-06WRN | 2191QU1-24V | 1 | 981-604X-98WAN | 1090A3-28V | 1 |
| 971-960Z-03WRN | 2191QL1-12V | 1 | 981-604X-98WBN | 1090A6-28V | 1 |
| 971-960Z-06WRN | 2191QU1-12V | 1 | 981-604X-98WQN | 1090A5-28V | 1 |
| 971-966K-03WQN | 2191QL5-24V | 1 | 981-604X-98WRN | 1090A1-28V | 1 |
| 971-966K-06WQN | 2191QU5-24V | 1 | 981-604X-98WWN | 1090A4-28V | 1 |
| 971-966Z-03WQN | 2191QL5-12V | 1 | 981-604X-99WAN | 1090N3-28V | 1 |
| 971-966Z-06WQN | 2191QU5-12V | 1 | 981-604X-99WQN | 1090N5-28V | 1 |
| 971-968K-03WYN | 2191QL7-24V | 1 | 981-604X-99WRN | 1090N1-28V | 1 |
| 971-968K-06WYN | 2191QUV-24V | 1 | 981-604X-99WWN | 1090N4-28V | 1 |
| 971-968Z-03WYN | 2191QL7-12V | 1 | 981-656B-95WQN | 1032D5 | 1 |
| 971-968Z-06WYN | 2191QU7-12V | 1 | 981-656B-96WQN | 1052C5 | 1 |
| | | | 981-656B-98WQN | 1052A5 | 1 |
| 981-602X-95WAN | 1090D3-6V | 1 | 981-656B-99WQN | 1052N5 | 1 |
| 981-602X-95WQN | 1090D5-6V | 1 | 981-656E-95WQN | 1033D5 | 1 |
| 981-602X-95WRN | 1090D1-6V | 1 | 981-656E-96WQN | 1053C5 | 1 |
| 981-602X-95WWN | 1090D4-6V | 1 | 981-656E-98WQN | 1053A5 | 1 |
| 981-602X-96WAN | 1090C3-6V | 1 | 981-657B-95WBN | 1032D6 | 1 |
| 981-602X-96WBN | 1090C6-6V | 1 | 981-657B-96WBN | 1052C6 | 1 |
| 981-602X-96WQN | 1090C5-6V | 1 | 981-657B-98WBN | 1052A6 | 1 |
| 981-602X-96WRN | 1090C1-6V | 1 | 981-657E-98WBN | 1053A6 | 1 |
| 981-602X-98WAN | 1090A3-6V | 1 | 981-670A-95WAN | 1030D3 | 1 |
| 981-602X-98WBN | 1090A6-6V | 1 | 981-670A-95WRN | 1030D1 | 1 |
| 981-602X-98WQN | 1090A5-6V | 1 | 981-670A-95WWN | 1030D4 | 1 |
| 981-602X-98WRN | 1090A1-6V | 1 | 981-670A-96WAN | 1050C3 | 1 |
| 981-602X-98WWN | 1090A4-6V | 1 | 981-670A-96WCN | 1050C2 | 1 |
| 981-602X-99WAN | 1090N3-6V | 1 | 981-670A-96WRN | 1050C1 | 1 |
| 981-602X-99WQN | 1090N5-6V | 1 | 981-670A-96WWN | 1050C4 | 1 |
| 981-602X-99WRN | 1090N1-6V | 1 | 981-670A-98WAN | 1050A3 | 1 |
| 981-602X-99WWN | 1090N4-6V | 1 | 981-670A-98WCN | 1050A2 | 1 |
| 981-603X-95WAN | 1090D3-12V | 1 | 981-670A-98WRN | 1050A1 | 1 |
| 981-603X-95WQN | 1090D5-12V | 1 | 981-670A-98WWN | 1050A4 | 1 |
| 981-603X-95WRN | 1090D1-12V | 1 | 981-670A-99WAN | 1050N3 | 1 |
| 981-603X-95WWN | 1090D4-12V | 1 | 981-670A-99WCN | 1050N2 | 1 |
| 981-603X-96WAN | 1090C3-12V | 1 | 981-670A-99WRN | 1050N1 | 1 |
| 981-603X-96WQN | 1090C5-12V | 1 | 981-670A-99WWN | 1050N4 | 1 |
| 981-603X-96WRN | 1090C1-12V | 1 | 981-671T-98WAN | 1051A3 | 1 |
| 981-603X-96WWN | 1090C4-12V | 1 | 981-671T-98WCN | 1051A2 | 1 |
| 981-603X-98WBN | 1090A6-12V | 1 | 981-671T-98WRN | 1051A1 | 1 |
| 981-603X-98WQN | 1090A5-12V | 1 | 981-671T-98WWN | 1051A4 | 1 |
| 981-603X-98WRN | 1090A1-12V | 1 | 981-756B-96WQN | 1052QC5 | 1 |
| 981-603X-98WWN | 1090A4-12V | 1 | 981-756B-99WQN | 1052QN5 | 1 |
| 981-603X-99WAN | 1090A3-12V | 1 | 981-756E-96WQN | 1053QC5 | 1 |
| 981-603X-99WGN | 1090N5-12V | 1 | 981-756E-98WQN | 1053QA5 | 1 |
| 981-603X-99WRN | 1090N1-12V | 1 | 981-757B-98WBN | 1052QA6 | 1 |
| 981-603X-99WWN | 1090N4-12V | 1 | 981-757E-98WBN | 1053QA6 | 1 |
| 981-604X-95WAN | 1090D3-28V | 1 | 981-770A-95WAN | 1030QD3 | 1 |
| 981-604X-95WQN | 1090D5-28V | 1 | 981-770A-95WRN | 1030QD1 | 1 |
| 981-604X-95WRN | 1090D1-28V | 1 | 981-770A-95WWN | 1030QD4 | 1 |

**NOTES:**

1. Minor physical difference

# IDI CROSS REFERENCE

## LITTELFUSE

| Littelfuse Model | IDI Model # | Notes | Littelfuse Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| 981-770A-96WAN | 1050QC3 | 1 | 981-770A-99WWN | 1050QN4 | 1 |
| 981-770A-96WCN | 1050QC2 | 1 | 981-771T-95WAN | 1031QD3 | 1 |
| 981-770A-96WRN | 1050QC1 | 1 | 981-771T-95WRN | 1031QD1 | 1 |
| 981-770A-96WWN | 1050QC4 | 1 | 981-771T-95WWN | 1031QD4 | 1 |
| 981-770A-98WAN | 1050QA3 | 1 | 981-771T-96WAN | 1051QC3 | 1 |
| 981-770A-98WCN | 1050QA2 | 1 | 981-771T-96WRN | 1051QC1 | 1 |
| 981-770A-98WRN | 1050QA1 | 1 | 981-771T-96WWN | 1051QC4 | 1 |
| 981-770A-98WWN | 1050QA4 | 1 | 981-771T-98WAN | 1051QA3 | 1 |
| 981-770A-99WAN | 1050QN3 | 1 | 981-771T-98WRN | 1051QA1 | 1 |
| 981-770A-99WRN | 1050QN1 | 1 | 981-771T-98WWN | 1051QA4 | 1 |

**NOTES:**

1. Minor physical difference

# IDI CROSS REFERENCE

## LITON

| Liton Model | IDI Model # | Notes | Liton Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| LTL-10203W | 4300E1NF | 2 | LTL-4253 | 4304H7 | 1,2 |
| LTL-10233-W | 4300E5NF | | LTL-4268 | 4308H1 | 1,2 |
| LTL-10253W | 4300E7NF | | LTL-4296 | 4308F3 | 1,2 |
| LTL-201 | 4300F1 | 1,2 | LTL-503-11 | 5300E1 | 2 |
| LTL-203 | 4300H1 | 1,2 | LTL-503-14 | 5640E1 | 2 |
| LTL-283CKH3 | 4310H1 | 1 | LTL-533-11 | 5300E5 | |
| LTL-3223A | 4306R1 | 1,2 | LTL-433-14 | 5640E5 | |
| LTL-3233A | 4306R5 | 1,2 | LTL-553-11 | 5300E7 | |
| LTL-3253A | 4306R7 | 1,2 | LTL-553-14 | 5640E7 | |
| LTL-4201 | 4303F1 | 1,2 | LTL-603-1 | 5100H1 | 1,2 |
| LTL-4203 | 4304H1 | 1,2 | LTL-633-1 | 5100H5 | 1,2 |
| LTL-4204 | 4305H1 | 1,2 | LTL-653-1 | 5100H7 | 1,2 |
| LTL-4233 | 4304H5 | 1,2 | | | |

**NOTES:**

1. Minor physical difference
2. IDI is brighter

CROSS REFERENCE

# IDI CROSS REFERENCE

## SOLICO

| Solico | IDI Model # | Notes |
|---|---|---|
| 1K14LAN1 | 4700A3 | 1 |
| 1K14LQX1 | 4702A5 | 1 |
| 1K14LRN1 | 4700A1 | 1 |
| 1K14LWN1 | 4700A4 | 1 |
| | | |
| 3LF4LAN1 | 2120A3 | |
| 3LF4LRN1 | 2120A1 | |
| 3LF4LWN1 | 2120A4 | |
| 3LF4NAB1 | 2195A3-6V | |
| 3LF4NAB2 | 2195A3-6V | |
| 3LF4NAB4 | 2195A3-12V | |
| 3LF4NAB5 | 2195A3-28V | |
| 3LF4NQB2 | 2195A4-6V | |
| 3LF4NQB4 | 2195A5-12V | |
| 3LF4NQB5 | 2195A5-28V | |
| 3LF4NQN1 | 2195A5-6V | |
| 3LF4NRB1 | 2195A1-6V | |
| 3LF4NRB2 | 2195A1-6V | |
| 3LF4NRB4 | 2195A1-12V | |
| 3LF4NRB5 | 2195A1-12V | |
| 3LF4NWB1 | 2195A4-6V | |
| 3LF4NWB2 | 2195A4-6V | |
| 3LF4NWB4 | 2195A4-12V | |
| 3LF4NWB5 | 2195A4-28V | |
| 3LF5LAN1 | 2150A3 | |
| 3LF5LCN1 | 2150A2 | |
| 3LF5LQX1 | 2152A5 | |
| 3LF5LRN1 | 2150A1 | |
| 3LF5LWN1 | 2150A4 | |
| | | |
| 3SF5NAB1 | 2194A3-6V | |
| 3SF5NAB2 | 2194A3-6V | |
| 3SF5NAB4 | 2194A3-12V | |
| 3SF5NAB5 | 2194A3-28V | |
| 3SF5NQB1 | 2194A5-6V | |
| 3SF5NQB2 | 2194A5-6V | |
| 3SF5NQB4 | 2194A5-12V | |
| 3SF5NQB5 | 2194A5-28V | |
| 3SF5NRB1 | 2194A1-6V | |
| 3SF5NRB2 | 2194A1-6V | |
| 3SF5NRB4 | 2194A1-12V | |
| 3SF5NRB5 | 2194A1-28V | |
| 3SF5NWB1 | 2194A4-6V | |
| 3SF5NWB2 | 2194A4-6V | |
| 3SF5NWB4 | 2194A4-12V | |
| 3SF5NWB5 | 2194A4-28V | |
| | | |
| 3WD4NAB1 | 2990D3-6V | 1 |
| 3WD4NAB2 | 2990D3-6V | 1 |
| 3WD4NAB4 | 2990D3-12V | 1 |
| 3WD4NAB5 | 2990D5-28V | 1 |
| 3WD4NBB1 | 2990D6-6V | 1 |
| 3WD4NBB2 | 2990D6-6V | 1 |
| 3WD4NBB4 | 2990D6-12V | 1 |
| 3WD4NBB5 | 2990D6-28V | 1 |
| 3WD4NQB1 | 2990D5-6V | 1 |
| 3WD4NQB2 | 2990D5-6V | 1 |
| 3WD4NQB4 | 2990D5-12V | 1 |
| 3WD4NQB5 | 2990D5-28V | 1 |
| 3WD4NRB1 | 2990D1-6V | 1 |
| 3WD4NRB2 | 2990D1-6V | 1 |
| 3WD4NRB4 | 2990D1-12V | 1 |
| 3WD4NRB5 | 2990D1-28V | 1 |
| 3WD4NWB1 | 2990D4-6V | 1 |
| 3WD4NWB2 | 2990D4-6V | 1 |
| 3WD4NWB4 | 2990D4-12V | 1 |
| 3WD4NWB5 | 2990D4-28V | 1 |
| | | |
| 5LD1LAN1 | 1050A3 | 1 |
| 5LD1LAN2 | 1051A3 | 1 |
| 5LD1LCN1 | 1050A2 | 1 |
| 5LD1LCN2 | 1051A2 | 1 |
| 5LD1LQX1 | 1052A5 | 1 |
| 5LD1LQX2 | 1053A5 | 1 |
| 5LD1LRN1 | 1050A1 | 1 |
| 5LD1LRN2 | 1051A1 | 1 |
| 5LD1LWN1 | 1050A4 | 1 |
| 5LD1LWN2 | 1051A4 | 1 |
| | | |
| 5LF1LAN1 | 1051N3 | 1 |
| 5LF2LAN1 | 1050C3 | 1 |
| 5LF2LAN2 | 1051C3 | 1 |
| 5LF2LCN1 | 1050C2 | 1 |
| 5LF2LCN2 | 1051C2 | 1 |
| 5LF2LQX1 | 1052C5 | 1 |
| 5LF2LQX2 | 1053C5 | 1 |
| 5LF2LRN1 | 1050C1 | 1 |
| 5LF2LRN2 | 1051C1 | 1 |
| 5LF2LWN1 | 1050C4 | 1 |
| 5LF2LWN2 | 1051C4 | 1 |
| 5LF3LAN1 | 1030D3 | 1 |
| 5LF3LAN2 | 1031D3 | 1 |
| 5LF3LQX1 | 1032D5 | 1 |
| 5LF3LQX2 | 1033D5 | 1 |
| 5LF3LRN1 | 1030D1 | 1 |
| 5LF3LRN2 | 1031D1 | 1 |
| 5LF3LWN1 | 1030D4 | 1 |
| 5LF3LWN2 | 1031D4 | 1 |
| | | |
| 5LS1LAN2 | 1051N3 | 1 |
| 5LS1LCN1 | 1050N2 | 1 |
| 5LS1LCN2 | 1051N2 | 1 |
| 5LS1LQX1 | 1052N5 | 1 |
| 5LS1LQX2 | 1053N5 | 1 |

**NOTES:**

1. Minor physical difference

# IDI CROSS REFERENCE

## SOLICO

| Solico | IDI Model # | Notes | Solico | IDI Model # | Notes |
|---|---|---|---|---|---|
| 5LS1LRN1 | 1050N1 | 1 | 5SF3NWB4 | 1090A4-12V | 1 |
| 5LS1LRN2 | 1051N1 | 1 | 5SF3NWB5 | 1090D4-28V | 1 |
| 5LS1LWN1 | 1050N4 | 1 | | | |
| 5LS1LWN2 | 1051N4 | 1 | 5SS1NAB1 | 1090N3-6V | 1 |
| | | | 5SS1NAB2 | 1090N3-6V | 1 |
| 5SD1NAB1 | 1090A3-6V | 1 | 5SS1NAB4 | 1090N4-12V | 1 |
| 5SD1NAB2 | 1090A3-6V | 1 | 5SS1NAB5 | 1090N3-28V | 1 |
| 5SD1NAB4 | 1090A3-12V | 1 | 5SS1NQB1 | 1090N5-6V | 1 |
| 5SD1NAB5 | 1090A3-28V | 1 | 5SS1NQB2 | 1090N5-6V | 1 |
| 5SD1NQB1 | 1090A5-6V | 1 | 5SS1NQB4 | 1090N5-12V | 1 |
| 5SD1NQB2 | 1090A5-6V | 1 | 5SS1NQB5 | 1090N5-28V | 1 |
| 5SD1NQB4 | 1090A5-12V | 1 | 5SS1NRB1 | 1090N1-6V | 1 |
| 5SD1NQB5 | 1090A5-28V | 1 | 5SS1NRB2 | 1090N1-6V | 1 |
| 5SD1NRB1 | 1090A1-6V | 1 | 5SS1NRB4 | 1090N1-12V | 1 |
| 5SD1NRB2 | 1090A1-6V | 1 | 5SS1NRB5 | 1090N1-28V | 1 |
| 5SD1NRB4 | 1090A1-12V | 1 | 5SS1NWB1 | 1090N4-6V | 1 |
| 5SD1NRB5 | 1090A1-28V | 1 | 5SS1NWB2 | 1090N4-6V | 1 |
| 5SD1NWB1 | 1090A4-6V | 1 | 5SS1NWB4 | 1090N4-12V | 1 |
| 5SD1NWB2 | 1090A4-6V | 1 | 5SS1NWB5 | 1090N4-28V | 1 |
| 5SD1NWB4 | 1090A4-12V | 1 | | | |
| 5SD1NWB5 | 1090A4-28V | 1 | 5TD1LAN1 | 1050QA1 | 1 |
| | | | 5TD1LAN2 | 1051QA3 | 1 |
| 5SF2NAB1 | 1090C3-6V | 1 | 5TD1LCN1 | 1050QA2 | 1 |
| 5SF2NAB2 | 1090C3-6V | 1 | 5TD1LCN2 | 1051QA2 | 1 |
| 5SF2NAB4 | 1090C3-12V | 1 | 5TD1LQX1 | 1052QA5 | 1 |
| 5SF2NAB5 | 1090C3-28V | 1 | 5TD1LQX2 | 1053QA5 | 1 |
| 5SF2NQB1 | 1090C5-6V | 1 | 5TD1LRN1 | 1050QA1 | 1 |
| 5SF2NQB2 | 1090C5-6V | 1 | 5TD1LRN2 | 1051QA1 | 1 |
| 5SF2NQB4 | 1090C5-12V | 1 | 5TD1LWN1 | 1050QA4 | 1 |
| 5SF2NQB5 | 1090C5-28V | 1 | 5TD1LWN2 | 1051QA4 | 1 |
| 5SF2NRB1 | 1090C1-6V | 1 | | | |
| 5SF2NRB2 | 1090C1-6V | 1 | 5TF2LAN1 | 1050QC3 | 1 |
| 5SF2NRB4 | 1090C1-12V | 1 | 5TF2LAN2 | 1051QC3 | 1 |
| 5SF2NRB5 | 1090C1-28V | 1 | 5TF2LCN1 | 1050QC2 | 1 |
| 5SF2NWB1 | 1090C4-6V | 1 | 5TF2LCN2 | 1051QC2 | 1 |
| 5SF2NWB2 | 1090C4-6V | 1 | 5TF2LQX1 | 1052QC5 | 1 |
| 5SF2NWB4 | 1090C4-12V | 1 | 5TF2LQX2 | 1053QC5 | 1 |
| 5SF2NWB5 | 1090C3-28V | 1 | 5TF2LRN1 | 1050QC1 | 1 |
| 5SF3NAB1 | 1090D3-6V | 1 | 5TF2LRN2 | 1051QC1 | 1 |
| 5SF3NAB2 | 1090D3-6V | 1 | 5TF2LWN1 | 1050QC4 | 1 |
| 5SF3NAB4 | 1090D3-12V | 1 | 5TF2LWN2 | 1051QC4 | 1 |
| 5SF3NAB5 | 1090D3-28V | 1 | 5TF3LAN1 | 1030QD3 | 1 |
| 5SF3NQB1 | 1090D5-6V | 1 | 5TF3LAN2 | 1031QD3 | 1 |
| 5SF3NQB2 | 1090D5-6V | 1 | 5TF3LQX1 | 1032QD5 | 1 |
| 5SF3NQB4 | 1090D5-12V | 1 | 5TF3LQX2 | 1033QD5 | 1 |
| 5SF3NQB5 | 1090D5-28V | 1 | 5TF3LRN1 | 1030QD1 | 1 |
| 5SF3NRB1 | 1090D1-6V | 1 | 5TF3LWN1 | 1030QD4 | 1 |
| 5SF3NRB2 | 1090D1-6V | 1 | 5TF3LWN2 | 1031QD4 | 1 |
| 5SF3NRB4 | 1090D1-12V | 1 | | | |
| 5SF3NRB5 | 1090D1-28V | 1 | 5TS1LAN1 | 1040QN3 | 1 |
| 5SF3NWB1 | 1090D4-6V | 1 | 5TS1LAN2 | 1051QN3 | 1 |
| 5SF3NWB2 | 1090D4-6V | 1 | 5TS1LCN1 | 1050QN2 | 1 |

**NOTES:**

1. Minor physical difference

# IDI CROSS REFERENCE

## SOLICO

| Solico | IDI Model # | Notes |
|---|---|---|
| 5TS1LCN2 | 1051QN2 | 1 |
| 5TS1LQX1 | 1052QN5 | 1 |
| 5TS1LQX2 | 1053QN5 | 1 |
| 5TS1LRN1 | 1050QN1 | 1 |
| 5TS1LRN2 | 1051QN1 | 1 |
| 5TS1LWN1 | 1050QN4 | 1 |
| 5TS1LWN2 | 1051QN4 | 1 |
| | | |
| ESBR3401 | 4303F1 | 1,3 |
| ESBR3411 | 4303F1 | 1,3 |
| ESBR3431 | 4303F1 | 1,3 |
| ESBR5131 | 4304H1 | 1,3 |
| ESBR5501 | 4305H1 | 1,3 |
| ESBR5511 | 4304H1 | 1,3 |
| ESBR5531 | 4304H1 | 1,3 |
| | | |
| LH-SPQ5531 | 5100H5 | 1 |
| LH-SPR5531 | 5100H1 | 1 |
| LH-SPY5531 | 5100H7 | 1 |
| | | |
| RR2LAN1 | 2330D3 | |
| RR2LAN1MS | 2330QD3 | |
| RR2LQX1 | 2332D5 | |
| RR2LQX1MS | 2332QD5 | |
| RR2LRN1 | 2330D1 | |
| RR2LRN1MS | 2330QD1 | |
| RR2LWN1 | 2330D4 | |
| RR2LWN1MS | 2330QD4 | |
| | | |
| SAA2201 | 4303F7 | 1,3 |
| SAA3431 | 4303F7 | 1,2 |
| SAA5531 | 4304H7 | 1,3 |
| SAA5541 | 4304H7 | 1,3 |
| | | |
| SAR2201 | 4307T1 | 1,2 |
| SAR2221 | 4307T1 | 1,3 |
| SAR3411 | 4303F1 | 1,3 |
| SAR3431 | 4303F1 | 1 |
| SAR5411 | 4304H1 | 1,3 |

| Solico | IDI Model # | Notes |
|---|---|---|
| SAR5431 | 4304H1 | 1,2 |
| SAR5511 | 4304H1 | 1,3 |
| SAR5531 | 4304H1 | 1 |
| | | |
| SAY3431 | 4303F7 | 1,2 |
| SAY5431 | 4304H7 | 1,2 |
| SAY5531 | 4304H7 | 1 |
| SBK2201 | 4307T1 | 1,3 |
| SBK2221 | 4307T1 | 1,3 |
| SBK3431 | 4303F1 | 1,3 |
| | | |
| SBR3401 | 4303F1 | 1,3 |
| SBR3411 | 4303F1 | 1,3 |
| SBR5101 | 4305H1 | 1,3 |
| SBR5131 | 4304H1 | 1,2 |
| SBR5501 | 4305H1 | 1,3 |
| SBR5511 | 4304H1 | 1,3 |
| SBR5531 | 4304H1 | 1,3 |
| | | |
| SPQ2201 | 4307T5 | 1,3 |
| SPQ2221 | 4307T5 | 1,3 |
| SPQ3331 | 4303F5 | 1,2 |
| SPQ3431 | 4303F5 | 1,2 |
| SPQ5431 | 4304H5 | 1,2 |
| SPQ5531 | 4304H5 | 1,2 |
| | | |
| SPR3301 | 4303F1 | 1,3 |
| SPR3311 | 4303F1 | 1,3 |
| SPR3331 | 4303F1 | 1,2 |
| SPR3431 | 4303F1 | 1,2 |
| SPR5431 | 4304H1 | 1 |
| SPR5531 | 4304H1 | 1,3 |
| | | |
| SPY2201 | 4307T7 | 1,3 |
| SPY2221 | 4307T7 | 1,3 |
| SPY3331 | 4303F7 | 1,2 |
| SPY3431 | 4303F7 | 1 |
| SPY5431 | 4304H7 | 1 |
| SPY5531 | 4304H7 | 1,3 |

**NOTES:**

1. Minor physical difference
2. IDI is brighter
3. Minor viewing angle difference

# IDI CROSS REFERENCE

## STANLEY

| Stanley Model | IDI Model # | Notes | Stanley Model | IDI Model # | Notes |
|---|---|---|---|---|---|
| ESAA3901 | 4308F3 | | SAY5721 | 4305H7 | |
| ESAA5701 | 4308H3 | | SAY5731 | 4304H7 | |
| ESBQ3901 | 4308F5 | | SPQ5131-AP | 4301H5/5 | |
| ESBQ5701 | 4308H5 | | SPQ5531REC | 4306D5 | |
| ESBQ5731 | 4308H15 | | SPQ5633 | 4304S5 | |
| ESBR3901 | 4308F1 | | SPQ5721 | 4304H5 | |
| ESBR5701 | 4308H1 | | SPQ5731 | 4304H5 | |
| ESPY5701 | 4308H7 | | SPR5531REC | 4306D1 | |
| H1K | 4310H1 | | SVR5731 | 4304H1 | |
| SAY5531REC | 4306D7 | | | | |

## SYLVANIA

| Sylvania | IDI Model # | Notes | Sylvania | IDI Model # | Notes |
|---|---|---|---|---|---|
| 30099 | 2803 | 1 | 31321 | 3003-2 | |
| 30120 | 2811 | | 31322 | 3003-3 | |
| 30122 | 2815 | | 31323 | 3003-4 | |
| 30124 | 2816 | | 31324 | 3003-5 | |
| 30125 | 2812 | | 31325 | 3003-6 | |
| 30126 | 2813 | | 31326 | 3003-7 | |
| 30150 | 3001 | | 31327 | 3003-8 | |
| 30151 | 3002 | | 31328 | 3003-9 | |
| 30152 | 3060 | | 31329 | 3003-10 | |
| 30153 | 3040 | | 31330 | 3003-11 | |
| 30160 | 3111 | | 31333 | 3004-6 | |
| 30161 | 3112 | | 31334 | 3004-4 | |
| 30162 | 3113 | | 31337 | 3004-2 | |
| 30163 | 3114 | | 31338 | 3004-3 | |
| 30164 | 3115 | | 31339 | 3004-5 | |
| 30165 | 3116 | | 31340 | 3004-7 | |
| 30166 | 3117 | | 31341 | 3004-8 | |
| 30170 | 3121 | | 31342 | 3004-9 | |
| 30171 | 3122 | | 31343 | 3004-10 | |
| 30172 | 3123 | | 31344 | 3004-11 | |
| 30173 | 3124 | | 31351 | 3132 | |
| 30174 | 3125 | | 31352 | 3131 | |
| 30175 | 3126 | | 31353 | 3130 | |
| 30176 | 3127 | | | | |
| 30180 | 3141 | | 33250 | 3006 | |
| 30182 | 3143 | | | | |
| 30183 | 3144 | | 33275 | 3004 | |
| 30184 | 3145 | | 37001 | 3031 | |
| 30185 | 3146 | | 37002 | 3037 | |
| | | | 37003 | 3034 | |
| 31250 | 3005 | | 37004 | 3035 | |
| 31275 | 3003 | | 37005 | 3036 | |
| | | | | | |
| 31301 | 3005-2 | | 38001 | 3011 | |
| 31302 | 3005-3 | | 38002 | 3017 | |
| 31303 | 3005-4 | | 38003 | 3014 | |
| 31304 | 3005-5 | | 38004 | 3015 | |
| 31305 | 3005-6 | | 38005 | 3016 | |
| 31306 | 3005-7 | | 38006 | 3014A | |
| 31307 | 3005-8 | | 38007 | 3013 | |
| 31308 | 3005-9 | | 38071 | 3021 | |
| 31309 | 3005-10 | | 38072 | 3027 | |
| 31310 | 3005-11 | | 38073 | 3024 | |
| 31311 | 3006-2 | | 38074 | 3025 | |
| 31312 | 3006-3 | | 38075 | 3026 | |
| 31313 | 3006-4 | | | | |
| 31314 | 3006-5 | | 4100 | 4100 | |
| 31315 | 3006-6 | | 4110 | 4110 | |
| 31316 | 3006-7 | | 4111 | 4111 | |
| 31317 | 3006-8 | | 4120 | 4120 | |
| 31318 | 3006-9 | | 4130 | 4130 | |
| 31319 | 3006-10 | | 4140 | 4140 | |
| 31320 | 3006-11 | | | | |

**NOTES:**

1. Minor physical difference

# INDEX
# (OFF-THE-SHELF MODELS)

# INDEX
# (OFF-THE-SHELF MODELS)