

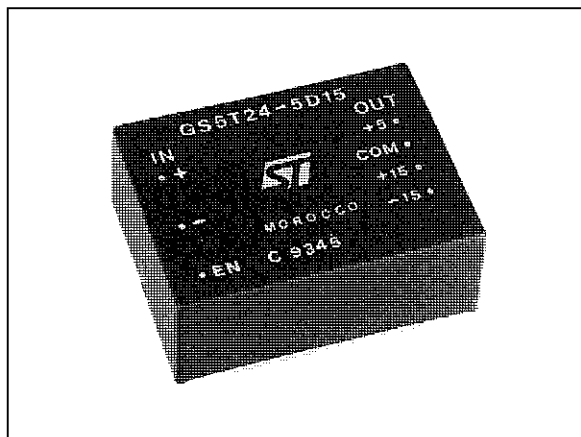
## 5W TRIPLE OUTPUT DC-DC CONVERTER

| Type        | $V_i$      | $V_o$  | $I_o$    |
|-------------|------------|--------|----------|
| GS5T24-5D15 | 17,5 to 30 | + 5 V  | 200 mA   |
|             |            | + 15 V | 125 mA   |
|             |            | - 15 V | - 125 mA |

### DESCRIPTION

The GS5T24-5D15 is a 5W DC-DC converter designed to provide three isolated outputs: 5V/200mA and a dual  $\pm 15V/\pm 125mA$ .

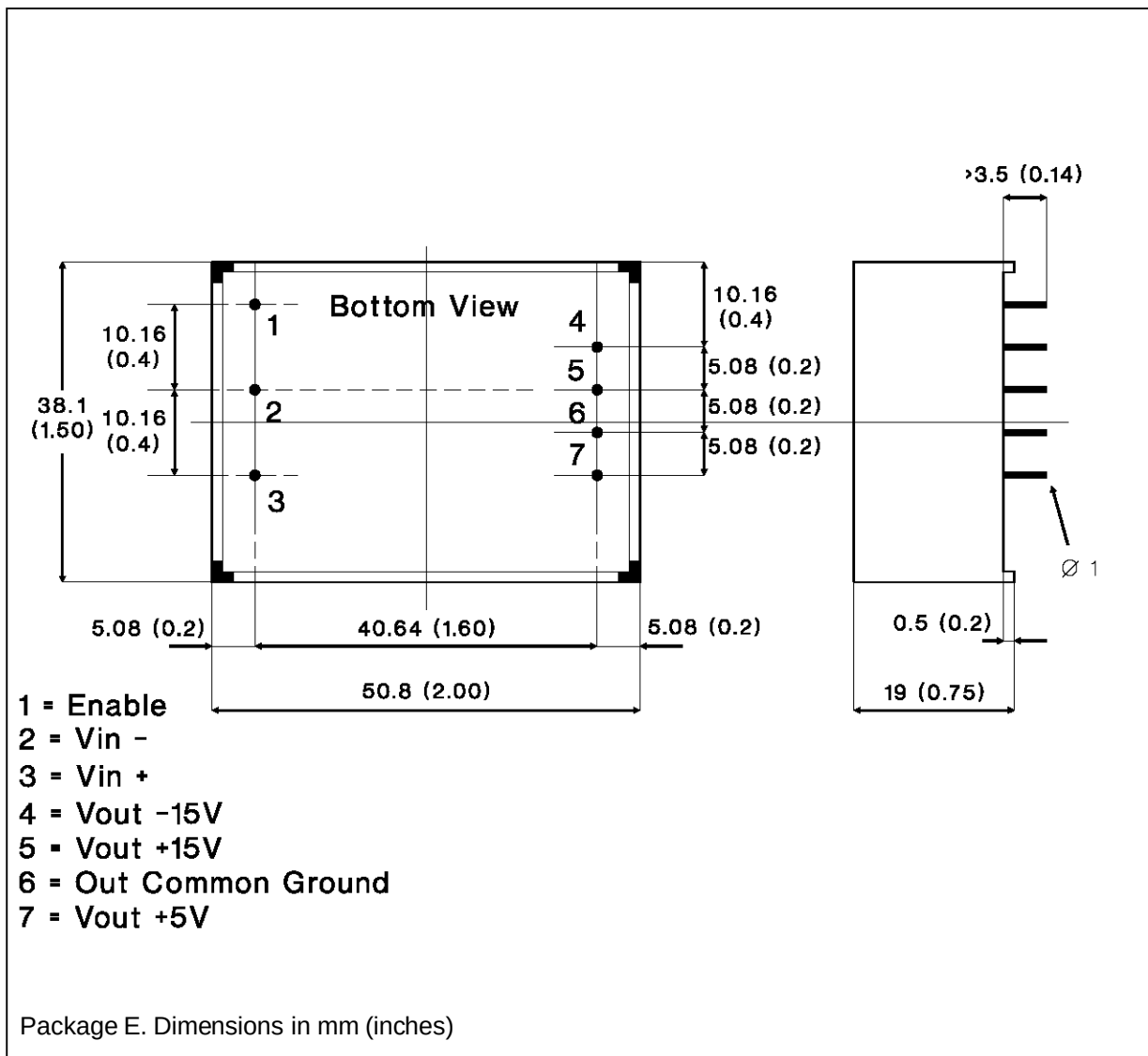
The module operates from a 24V input source and offers 2500Vdc isolation voltage. A high level TTL/CMOS compatible input will enable the unit; a low input will inhibit it.



### ELECTRICAL CHARACTERISTICS ( $T_{amb.} = 25^\circ \text{C}$ unless otherwise specified)

| Symbol    | Parameter                           | Test Conditions                                                                                                       | Min     | Typ     | Max     | Unit             |
|-----------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------|---------|---------|------------------|
| $V_i$     | Input Voltage                       | $V_{o1} = 5V$ $I_{o1} = 0$ to 200mA<br>$V_{o2} = 15V$ $I_{o2} = 0$ to 125mA<br>$V_{o3} = -15V$ $I_{o3} = 0$ to -125mA | 17.5    | 24.0    | 30.0    | V                |
| $I_{ir}$  | Input Reflected Current             | $V_i = 17.5$ to 30V   Full Load on All Outputs                                                                        |         |         | 75      | mApp             |
| $V_{o1}$  | Output Voltage 1                    | $V_i = 17.5$ to 30V $I_{o1} = 0$ to 200mA                                                                             | 4.75    | 5.00    | 5.25    | V                |
| $V_{o2}$  | Output Voltage 2                    | $V_i = 17.5$ to 30V $I_{o2} = 0$ to 125mA                                                                             | 14.25   | 15.00   | 15.75   | V                |
| $V_{o3}$  | Output Voltage 3                    | $V_i = 17.5$ to 30V $I_{o3} = 0$ to -125mA                                                                            | - 14.25 | - 15.00 | - 15.75 | V                |
| $V_{or1}$ | Output Ripple Voltage 1             | $V_i = 24V$ Full Load on All Outputs                                                                                  |         |         | 30      | mVpp             |
| $V_{or2}$ | Output Ripple Voltage 2             | $V_i = 24V$ Full Load on All Outputs                                                                                  |         |         | 90      | mVpp             |
| $V_{or3}$ | Output Ripple Voltage 3             | $V_i = 24V$ Full Load on All Outputs                                                                                  |         |         | 90      | mVpp             |
| $I_{o1}$  | Output Current 1                    | $V_i = 17.5$ to 30V<br>$V_{o1} = 5V$                                                                                  | 0       |         | 200     | mA               |
| $I_{o2}$  | Output Current 2                    | $V_i = 17.5$ to 30V $I_{o3} = 0$ to 125mA<br>$V_{o2} = 15V$                                                           | 0       |         | 125     | mA               |
| $I_{o3}$  | Output Current 3                    | $V_i = 17.5$ to 30V $I_{o2} = 0$ to -125mA<br>$V_{o3} = -15V$                                                         | 0       |         | 125     | mA               |
| $V_{is}$  | Isolation Voltage                   |                                                                                                                       | 2500    |         |         | VDC              |
| $f_s$     | Switching Frequency                 |                                                                                                                       |         | 120     |         | kHz              |
| $\eta$    | Efficiency                          | $V_i = 24V$ Full Load on All Outputs                                                                                  | 65      | 70      |         | %                |
| $T_{op}$  | Operating Ambient Temperature Range | Still air                                                                                                             | 0       |         | +40     | $^\circ\text{C}$ |
| $T_{op}$  | Operating Ambient Temperature Range | Forced ventilation, air speed = 100 LFM                                                                               | 0       |         | +60     | $^\circ\text{C}$ |
| $T_{stg}$ | Storage Temperature Range           |                                                                                                                       | - 20    |         | +85     | $^\circ\text{C}$ |

CONNECTION DIAGRAM AND MECHANICAL DATA



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