

LM372 AM/IF Strip

REFERENCE TABLE

Code	Stock No.
LM372H	19754D
LM372N	19755B

GENERAL DESCRIPTION

The LM372 is a broadband AM receiver sub-system, including a high gain amplifier, an active detector, and self-contained automatic gain control. It is intended for IF or TRF applications from 50kHz to 2MHz. Bandpass shaping is performed by a single, external filter, which may be ceramic, crystal, mechanical, or LC, having single or multiple poles.

FEATURES

AGC range: 60dB

Audio output of 0.8V p-p for 80% modulated inputs, at carrier levels as low as 50 μ V r.m.s.

Total dissipation only 8.4mW from +6V supply, usable with supply up to +15V.

AGC time constant and audio frequency response selected by choice of external capacitors.

Internal supply regulators eliminate individual stage decoupling.

AGC voltage available to drive receiver 'front end'.

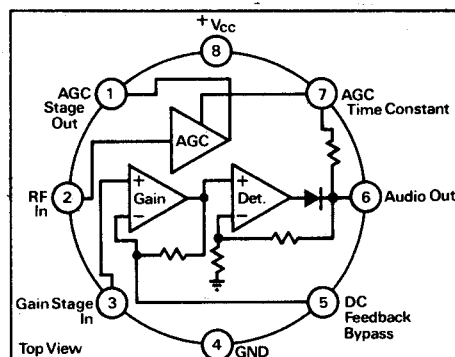
ABSOLUTE MAXIMUM RATINGS

Supply voltage range	+6V to +15V
Storage temperature	-65°C to +150°C
Operating temperature LM372	0°C to +70°C
RF input level, Pin 2	500mV r.m.s.

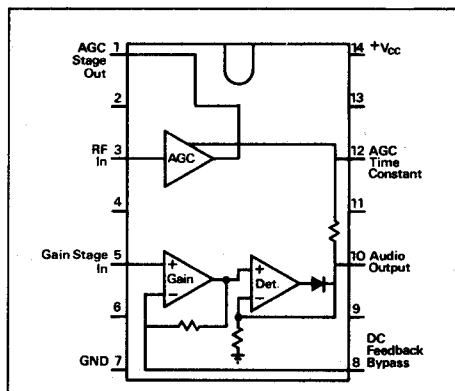
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Power Supply Drain	I_{PS}	$V_{CC} = 6V$, Input = 50 mV $f = 455 \text{ kHz}$		1.4		mA
		$V_{CC} = 6V$, Input = 50 μ V $f = 455 \text{ kHz}$		1.7		mA
		$V_{CC} = 15V$, Input = 50 mV $f = 455 \text{ kHz}$		2.5	3.2	mA
AGC Range	AGCR	$V_{CC} = 6V$, $f = 455 \text{ kHz}$	47	69		dB
AGC Threshold	$V_{IN} (th)$	$V_{CC} = 6V$, $f = 455 \text{ kHz}$		50		μ V, r.m.s.
Maximum Usable Frequency	MUF	$V_{CC} = 6V$		2.0		MHz
Audio Output Voltage	V_{OUT}	V_{IN} Between 50 μ V and 50 mV, 455 kHz 80% modulated by 100 Hz $V_{CC} = 6V$	0.35	0.8		V p-p
		$V_{CC} = 15V$	0.40	0.9		V, p-p

CONNECTION DIAGRAMS



See outline drawing No. 97 for dimensions.



See outline drawing No. 109 for dimensions.