

AC238

5 TO 200 MHz TO-8 CASCADABLE AMPLIFIER

Typical Values

High Gain	AC238 32.0 dB
Low Noise	2.6 dB
Medium Output Level	+15.5 dBm
High Reverse Isolation	+38 dB
High Efficiency	
High Performance Thin Film	
Standard Size TO-8 Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed		
		0 to 50 °C	-55 to +85 °C	
Frequency (Min.)		5-300 MHz	5-200 MHz	5-200 MHz
Small Signal Gain (Min.)	32.0 dB	31.0 dB	30.0 dB	30.0 dB
Gain Flatness (Max.)	±0.2 dB	±0.4 dB	±0.7 dB	±0.7 dB
Noise Figure (Max.)	2.6 dB	3.0 dB	3.5 dB	3.5 dB
SWR (Max.) Input/Output	1.1:1	1.3:1	1.4:1	1.4:1
Power Output (Min.) @ 1dB comp.	+15.5 dBm	+14.5 dBm	+14.0 dBm	+14.0 dBm
Reverse Isolation	38 dB	—	—	—
DC Current (Max.)	64 mA	67 mA	69 mA	69 mA

* Measured in a 50-ohm system at +5 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

Second Order Harmonic Intercept Point	AC238 +54.5 dBm
Second Order Two Tone Intercept Point	+48.5 dBm
Third Order Two Tone Intercept Point	+30.0 dBm

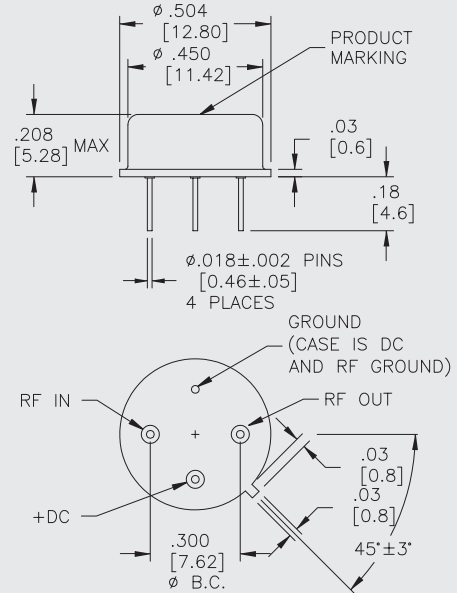
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+10 Volts
Maximum Continuous RF Input Power	+10 dBm
Maximum Short Term Input Power (1 Minute Max.)	50 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+125 °C
Thermal Resistance¹ (θjc)	+89.9 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+17.8 °C

¹ Thermal resistance is based on total power dissipation.

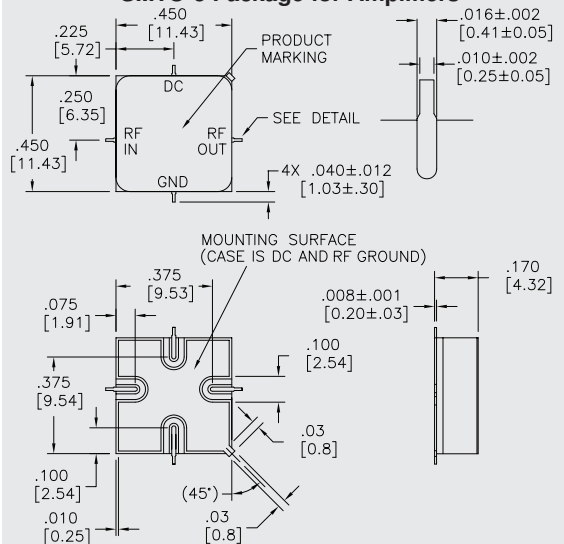
AC238

TO-8 Package for Amplifiers



AS238

SMT0-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]