

**AC508****5 TO 500 MHz
TO-8 CASCADABLE AMPLIFIER***Typical Values*

Medium Output Level	+19.0 dBm
High Third Order I.P.	+31 dBm
High Performance Thin Film	
Standard Size TO-8 Package	

AC508**SPECIFICATIONS***

Parameter	Typical	Guaranteed	
		0 to 50° C	-55 to +85° C
Frequency (Min.)	5-600 MHz	5-500 MHz	5-500 MHz
Small Signal Gain (Min.)	13.5 dB	13.0 dB	12.5 dB
Gain Flatness (Max.)	±0.4 dB	±0.5 dB	±0.7 dB
Noise Figure (Max.)	<4.5 dB	5.0 dB	5.5 dB
SWR (Max.) Input/Output	1.5:1	1.7:1	1.9:1
Power Output (Min.) @ 1dB comp.	+19.5 dBm	+18.0 dBm	+17.5 dBm
DC Current (Max.)	65 mA	69 mA	71 mA

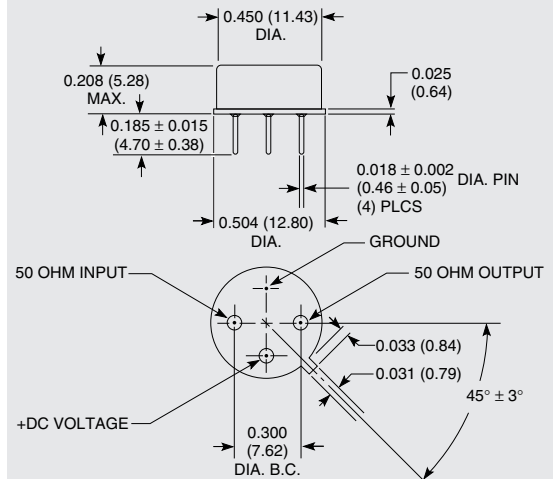
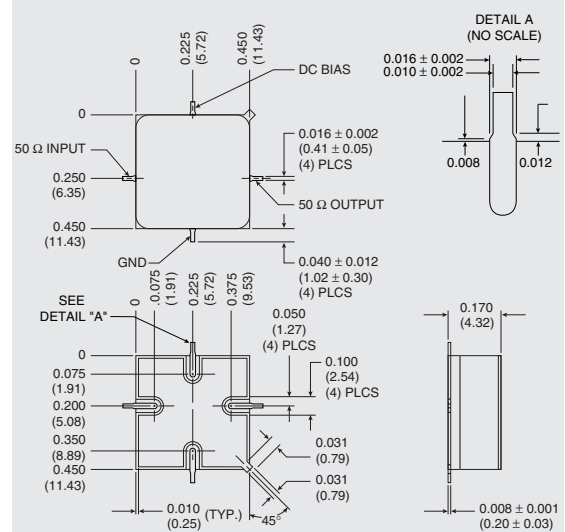
* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE*Typical @ 25° C; 100 MHz*

Second Order Harmonic Intercept Point	+52 dBm
Second Order Two Tone Intercept Point	+46 dBm
Third Order Two Tone Intercept Point	+33 dBm

AC508**ABSOLUTE MAXIMUM RATINGS**

Storage Temperature	-62 to 125° C
Maximum Case Temperature	+125° C
Maximum DC Voltage	+19 Volts
Maximum Continuous RF Input Power	+13 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 µsec Max.)	0.5 Watt
Burn-in Temperature	+105° C
Thermal Resistance¹ (θjc)	+28° C/Watt
Junction Temperature Rise Above Case (Tjc)	+31.7° C

¹ Thermal resistance is based on total power dissipation.**AC508****TO-8 Package for Amplifiers****AS508****SMT0-8 Package for Amplifiers**

DIMENSIONS ARE IN INCHES (MILLIMETERS)