

AC1582

5 TO 1500 MHz TO-8 CASCADABLE AMPLIFIER

Typical Values

	AC1582
Medium Gain	12.2 dB
Medium Output Level	+11.8 dBm
High Performance Thin Film	
Standard Size TO-8 Package	

SPECIFICATIONS

Parameter	Typical	Guaranteed*	
		0 to 50° C	-55 to +85° C
Frequency (Min.)	5-1600 MHz	5-1500 MHz	5-1500 MHz
Small Signal Gain (Min.)	12.2 dB	11.8 dB	11.0 dB
Gain Flatness (Max.)	±0.3 dB	±0.5 dB	±0.7 dB
Noise Figure (Max.)	4.2 dB	5.0 dB	5.5 dB
SWR (Max.) Input/Output	<1.5:1	1.7:1	2.0:1
Power Output (Min.) @ 1dB comp.	+11.8 dBm	+10.5 dBm	+10.0 dBm
DC Current (Max.)	29 mA	32 mA	35 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25° C; 100 MHz

	AC1582
Second Order Harmonic Intercept Point	+40 dBm
Second Order Two Tone Intercept Point	+34 dBm
Third Order Two Tone Intercept Point	+24 dBm

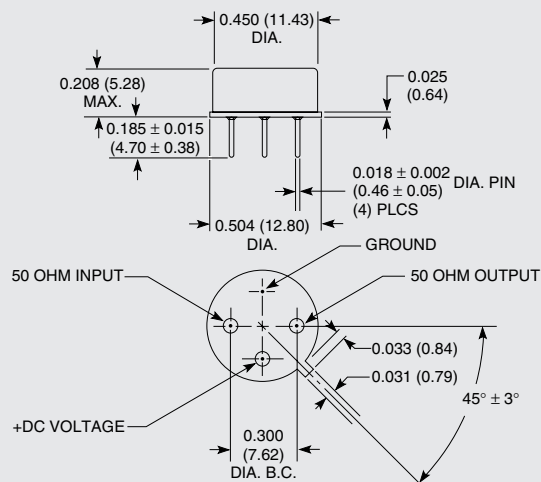
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to 125° C
Maximum Case Temperature	+125° C
Maximum DC Voltage	+10 Volts
Maximum Continuous RF Input Power	+13 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 Resistance ¹ (θjc)	+69° C/Watt
Junction Temperature Rise Above Case (Tjc)	+11.0° C

¹ Thermal resistance is based on total power dissipation.

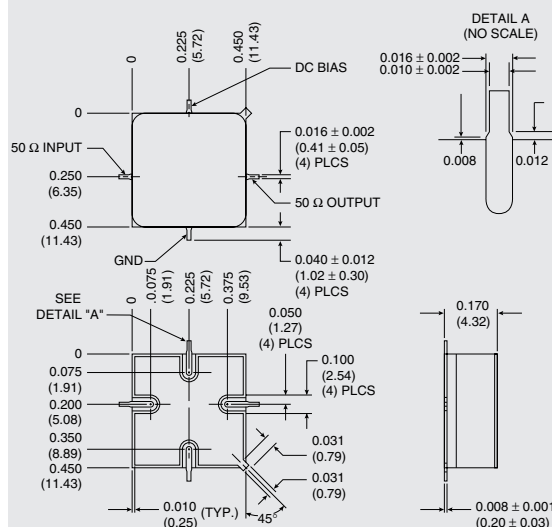
AC1582

TO-8 Package for Amplifiers



AS1582

SMT0-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES (MILLIMETERS)