

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

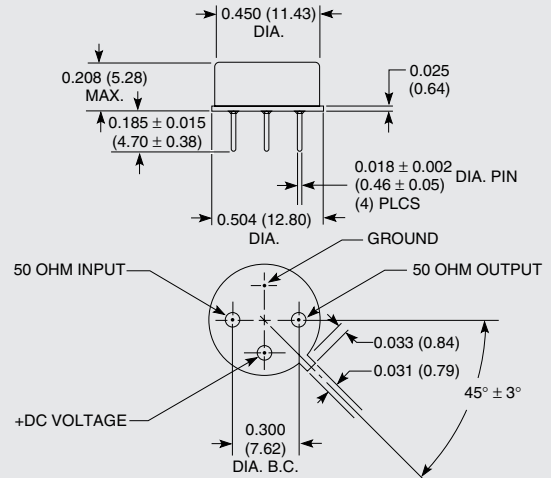
ABSOLUTE MAXIMUM RATINGS

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 Resistance¹ (θjc) +69° C/Watt
Junction Temperature Rise Above Case (Tjc) +11.0° C

¹ Thermal resistance is based on total power dissipation.

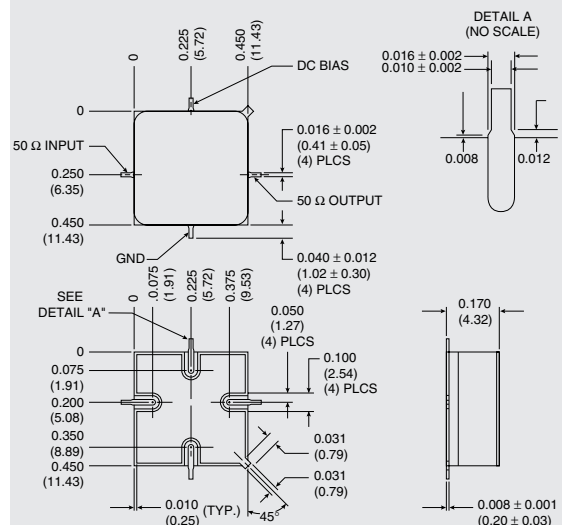
AC1582

TO-8 Package for Amplifiers



AS1582

SMT0-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES (MILLIMETERS)