TELEDYNE COUGAR
A Teledyne Technologies Company

PRELIMINARY

AC2215 200 TO 2200 MHz TO-8 CASCADABLE AMPLIFIER

Typical Values	*AC2215*
High Gain	*19.0 dB*
Low Noise Figure	*2.0 dB*
Medium Output Power	*+18.0 dBm*

High Performance Thin Film
Standard Size TO-8 Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50° C	Guaranteed -55 to +85° C
Frequency (Min.)	**150-2200 MHz**	**200-2200 MHz**	**200-2200 MHz**
Small Signal Gain (Min.)	19.0 dB	18.0 dB	17.5 dB
Gain Flatness (Max.)	±0.5 dB	±0.8 dB	±1.0 dB
Noise Figure (Max.)	2.0 dB	2.4 dB	2.8 dB
SWR (Max.) Input/Output	1.4:1	1.6:1	1.7:1
Power Output (Min.) @ 1dB comp.	+18.0 dBm	+17.0 dBm	+16.5 dBm
DC Current (Max.)	65 mA	70 mA	75 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25° C	*AC2215*
Second Order Harmonic Intercept Point	+40 dBm
Second Order Two Tone Intercept Point	+34 dBm
Third Order Two Tone Intercept Point	+28 dBm

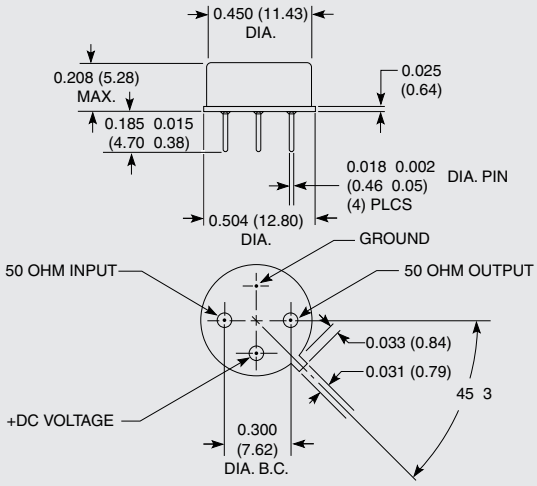
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125° C
Maximum Case Temperature	+125° C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+17 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 µsec Max.)	0.5 Watt
Burn-in Temperature	+100° C
Thermal Resistance[1] (θjc)	—° C/Watt
Junction Temperature Rise Above Case (Tjc)	—° C

[1] Thermal resistance is based on total power dissipation.

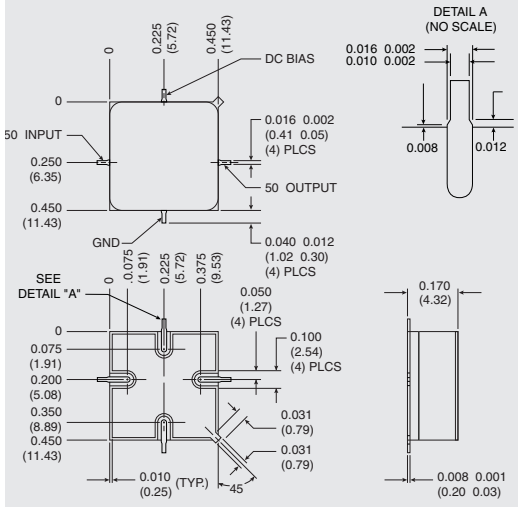
AC2215

TO-8 Package for Amplifiers



AS2215

SMTO-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES (MILLIMETERS)