TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY
Rev. 10/15

AC2356 1700 TO 2300 MHz TO-8 CASCADABLE AMPLIFIER

Typical Values	AC2356
High Gain	22.0 dB
Low Noise Figure	1.3 dB
Medium Output Power	+13.0 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.)	1600-2300 MHz	1700-2300 MHz	1700-2300 MHz
Small Signal Gain (Min.)	22.0 dB	21.0 dB	20.5 dB
Gain Flatness (Max.)	±0.7 dB	±0.9 dB	±1.0 dB
Noise Figure (Max.)	1.3 dB	1.6 dB	1.9 dB
SWR (Max.) Input/Output	1.4:1	1.6:1	1.8:1
Power Output (Min.) @ 1dB comp.	+13.0 dBm	+12.0 dBm	+11.0 dBm
DC Current (Max.)	40 mA	48 mA	48 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	AC2356
Second Order Harmonic Intercept Point	+48 dBm
Second Order Two Tone Intercept Point	+42 dBm
Third Order Two Tone Intercept Point	+25 dBm

ABSOLUTE MAXIMUM RATINGS

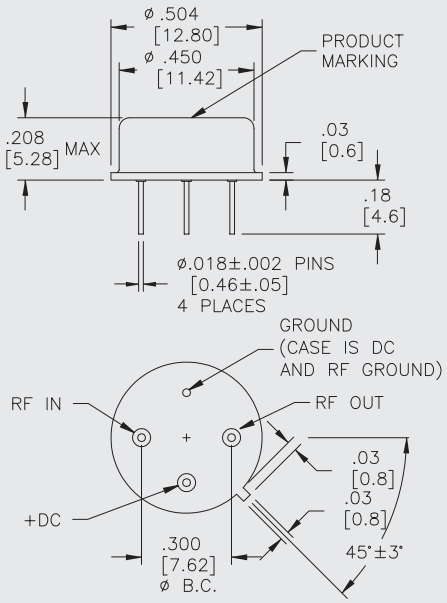
Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+10 Volts
Maximum Continuous RF Input Power	+10 dBm
Maximum Short Term Input Power (1 Minute Max.)	50 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+125 °C
Thermal Resistance[1] (θjc)	64.3 °C/Watt
Junction Temperature Rise Above Case[2] (Tjc)	15.4 °C

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

[2] Tjc shows 2nd stage (output), worst case.

AC2356

TO-8 Package for Amplifiers



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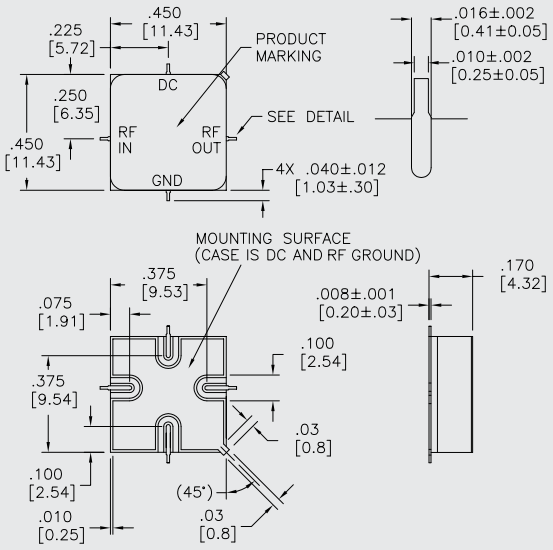
SMTO-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]