TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

AC3035

1000 TO 3000 MHz TO-8 CASCADABLE AMPLIFIER

Typical Values	AC3035
High Gain	**21.5 dB**
Low Noise	**2.5 dB**
High Reverse Isolation	**36 dB**
High Efficiency	**35 mA, +5V**

High Performance Thin Film
Standard Size TO-8 Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	**900-3100 MHz**	**1000-3000 MHz**	**1000-3000 MHz**
Small Signal Gain (Min.)	21.5 dB	20.5 dB	20.0 dB
Gain Flatness (Max.)	±0.6 dB	±0.8 dB	±1.0 dB
Noise Figure (Max.)	2.5 dB	2.8 dB	3.2 dB
SWR (Max.) Input/Output	1.5:1	1.7:1	1.9:1
Power Output (Min.) @ 1dB comp.	+8.0 dBm	+6.0 dBm	+5.0 dBm
High Reverse Isolation	36 dB	—	—
DC Current (Max.)	35 mA	38 mA	42 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	AC3035
Second Order Harmonic Intercept Point	+40 dBm
Second Order Two Tone Intercept Point	+34 dBm
Third Order Two Tone Intercept Point	+17 dBm

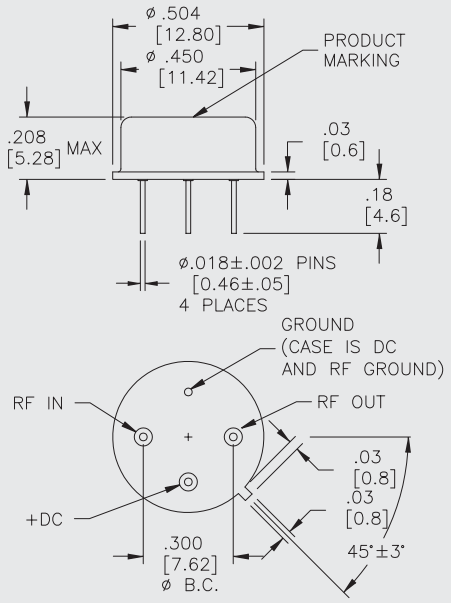
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+6 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)	— °C/Watt
Junction Temperature Rise Above Case (Tjc)	— °C

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

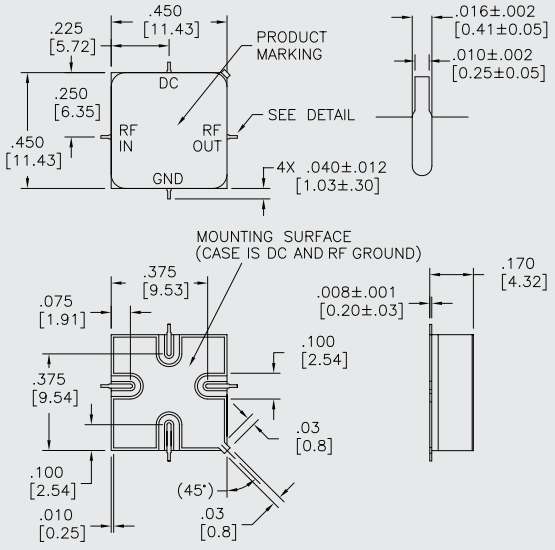
AC3035

TO-8 Package for Amplifiers



AS3035

SMTO-8 Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]