TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

AR4029

200 TO 4000 MHz TO-8B CASCADABLE AMPLIFIER

Typical Values	AR4029
Low Noise Figure	<2.5 dB
High Ouput Power	+26.0 dBm

High Performance Thin Film TO-8B Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	100-4200 MHz	200-4000 MHz	200-4000 MHz
Small Signal Gain (Min.)	22.0 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	3.0 dB	3.5 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+26.0^ dBm	+25.0^ dBm	+24.5^ dBm
DC Current (Max.)	188 mA	200 mA	220 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.
^ 3.0 dB lower above 3500 MHz.

INTERMODULATION PERFORMANCE

Typical @ 1GHz	AR4029
Second Order Harmonic Intercept Point	+59 dBm
Second Order Two Tone Intercept Point	+53 dBm
Third Order Two Tone Intercept Point	+38 dBm

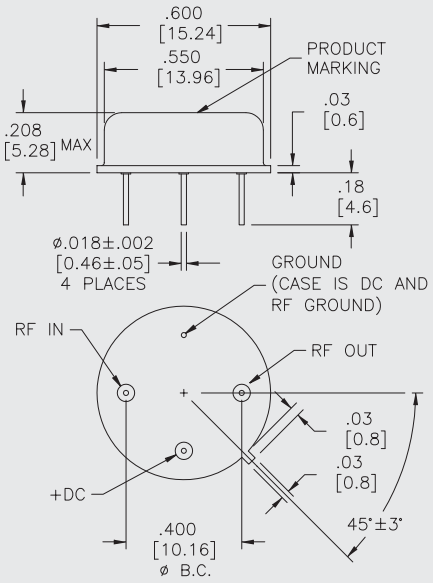
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+110 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+11 dBm
Maximum Short Term Input Power (1 Minute Max.)	+15 dBm
Maximum Peak Power (3 µsec Max.)	+18 dBm
Burn-in Temperature	+85 °C
Thermal Resistance[1] (θjc)	12 °C/Watt
Junction Temperature Rise Above Case (Tjc)	33.2 °C

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

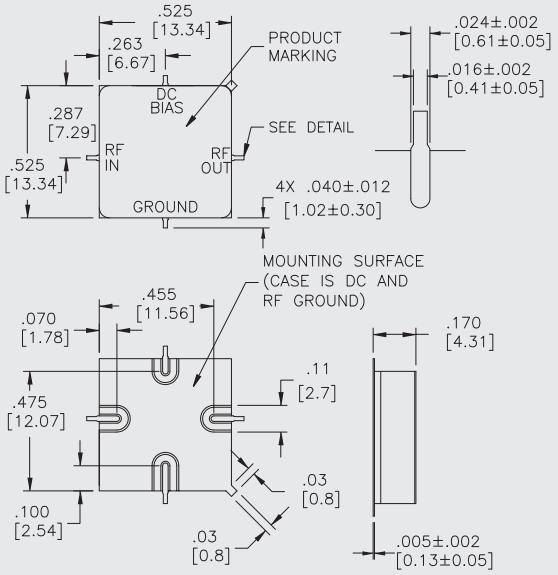
AR4029

TO-8B Package for Amplifiers



ARS4029

SMTO-8B Package for Amplifiers



DIMENSIONS ARE IN INCHES [MILLIMETERS]