

# A2CP6008

# 2000-6000 MHz COUGARPAK™ AMPLIFIER

Typical Values	A2CP6008
High Power Output .....	+24.0 dBm
Medium Gain .....	11.0 dB
Low Noise Figure .....	3.0 dB
High Performance Thin Film Standard Two-stage CougarPak™ Package	

## SPECIFICATIONS\*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	1800-6000 MHz	2000-6000 MHz	2000-6000 MHz
Small Signal Gain (Min.)	11.0 dB	10.0 dB	9.5 dB
Gain Flatness (Max.)	±1.0 dB	±1.5 dB	±1.8 dB
Noise Figure (Max.)	3.0 dB	3.7 dB	4.2 dB
SWR (Max.) Input/Output	1.5:1	1.7:1	1.7:1
Power Output (Min.) @ 1dB comp.	+24.0 dBm	+23.0 dBm	+22.5 dBm
Reverse Isolation	23 dB	—	—
DC Current (Max.)	250 mA	265 mA	280 mA

\* Measured in a 50-ohm system at +12 Vdc unless otherwise specified.

## INTERMODULATION PERFORMANCE

Typical @ 25 °C	A2CP6008
Second Order Harmonic Intercept Point .....	+56 dBm
Second Order Two Tone Intercept Point .....	+50 dBm
Third Order Two Tone Intercept Point .....	+34 dBm

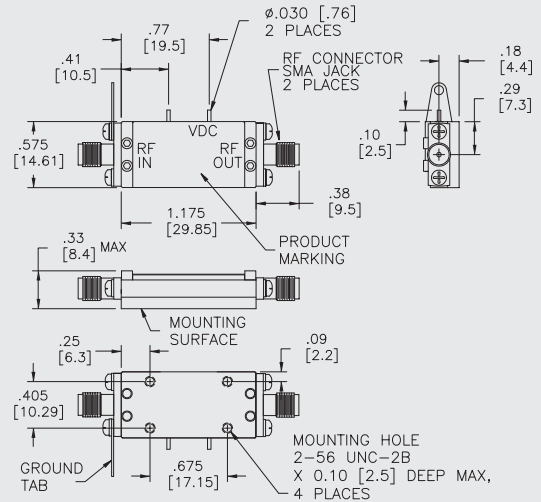
## ABSOLUTE MAXIMUM RATINGS

Storage Temperature .....	-62 to +150 °C
Maximum Case Temperature .....	+125 °C
Maximum DC Voltage .....	+18 Volts
Maximum Continuous RF Input Power .....	+22 dBm
Maximum Short Term Input Power (1 Minute Max.) .....	+25 dBm
Maximum Peak Power (3 μsec Max.) .....	+28 dBm
Burn-in Temperature .....	100 °C
Thermal Resistance <sup>1</sup> (θjc) .....	34 °C/Watt
Junction Temperature Rise Above Case (Tjc) .....	42 °C

<sup>1</sup> Thermal resistance is based on total power dissipation.

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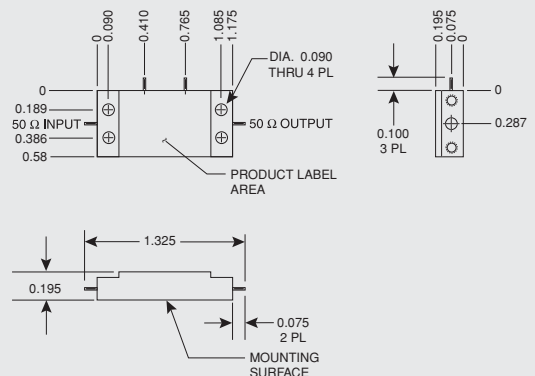
### CougarPak™ Connectorized Package (two-stage)



Package only sold with SMA connectors and base mounting plate; both can be removed. Pin package for reference only.

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### CougarPak™ Pin Package (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]