

A2CP12029

6.0 TO 12.0 GHz COUGARPAK™ AMPLIFIER

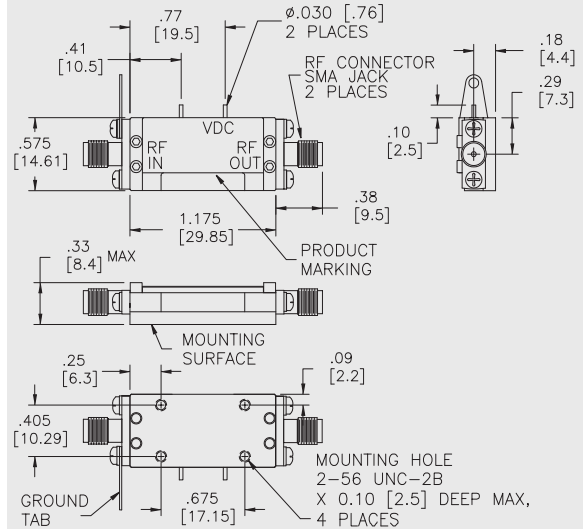
Typical Values

High Gain	23.0 dB
High Output Level	0.5 Watt
High Third Order I.P.	+37 dBm
High Second Order I.P.	+51 dBm
High Reverse Isolation	35 dB
High Performance Thin Film Standard Two-stage CougarPak™ Package	

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High Frequency CougarPak™ SMA Package (two-stage)



SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	5.0-12.0 GHz	6.0-12.0 GHz	6.0-12.0 GHz
Small Signal Gain (Min.)	23.0 dB	20.5 dB	20.0 dB
Gain Flatness (Max.)	±0.8 dB	±1.0 dB	±1.2 dB
Noise Figure (Max.)	4.0 dB	4.5 dB	5.0 dB
SWR (Max.) Input/Output	1.8:1	2.0:1	2.0:1
Power Output (Min.) @ 1dB comp.	+27.5 dBm	+26.5 dBm	+26.0 dBm
Reverse Isolation	35 dB	—	—
DC Current (Max.)	335 mA	342 mA	350 mA

* Measured in a 50-ohm system at +10 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

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Second Order Harmonic Intercept Point	+57 dBm
Second Order Two Tone Intercept Point	+51 dBm
Third Order Two Tone Intercept Point	+37 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+85 °C
Maximum DC Voltage	+12 Volts
Maximum Continuous RF Input Power	+13 dBm
Maximum Short Term Input Power (1 Minute Max.)	+17 dBm
Maximum Peak Power (3 μsec Max.)	+20 dBm
Burn-in Temperature	+85 °C
Thermal Resistance¹ (θjc)	+18.2 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+62.1 °C

¹ Thermal resistance is based on total power dissipation.

DIMENSIONS ARE IN INCHES [MILLIMETERS]