

A2CP5021

1000 TO 5000 MHz COUGARPAK™ AMPLIFIER

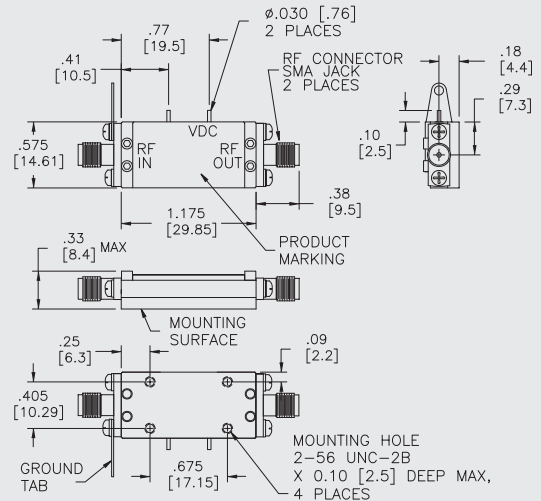
Typical Values

High Gain	36.0 dB
Low Noise Figure	2.3 dB
High Output Level	+21.5 dBm
High Third Order I.P.	+25 dBm
High Reverse Isolation	79 dB
High Performance Thin Film	
Standard Two-stage CougarPak™ Package	

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CougarPak™ Connectorized Package (two-stage)



SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	500-5000 MHz	1000-5000 MHz	1000-5000 MHz
Small Signal Gain (Min.)	36.0 dB	34.0 dB	32.0 dB
Gain Flatness (Max.)	—	±0.8 dB	±1.2 dB
Noise Figure (Max.)	2.3 dB	3.0 dB	3.5 dB
SWR (Max.) Input/Output	—	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+21.5 dBm	+20.0 dBm	19.0 dBm
Reverse Isolation	79 dB	—	—
DC Current (Max.)	250 mA	256 mA	262 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

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Second Order Harmonic Intercept Point	+55 dBm
Second Order Two Tone Intercept Point	+49 dBm
Third Order Two Tone Intercept Point	+25 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+105 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+17 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+105 °C
Thermal Resistance¹ (θjc)	+39 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+51.3 °C

¹ Thermal resistance is based on total power dissipation.

DIMENSIONS ARE IN INCHES [MILLIMETERS]