

A2CP5121

300 TO 5000 MHz COUGARPAK™ AMPLIFIER

Typical Values	A2CP5121
High Gain	28.5 dB
Low Noise Figure	2.2 dB
High Output Level	+21.5 dBm
High Reverse Isolation	54 dB
High Performance Thin Film Standard Two-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	100-5000 MHz	300-5000 MHz	300-5000 MHz
Small Signal Gain (Min.)	28.5 dB	26.0 dB	24.0 dB
Gain Flatness (Max.)	—	±1.0 dB	±1.2 dB
Noise Figure (Max.)	2.6 dB	3.0 dB	3.5 dB
SWR (Max.) Input/Output	—	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+20.4† dBm	+20.0† dBm	19.0† dBm
Reverse Isolation	54 dB	—	—
DC Current (Max.)	205 mA	220 mA	228 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.
† 2.0 dBm less above 4000 MHz.

INTERMODULATION PERFORMANCE

Typical @ 25 °C	A2CP5121
Second Order Harmonic Intercept Point	+56 dBm
Second Order Two Tone Intercept Point	+50 dBm
Third Order Two Tone Intercept Point	+30.5 dBm

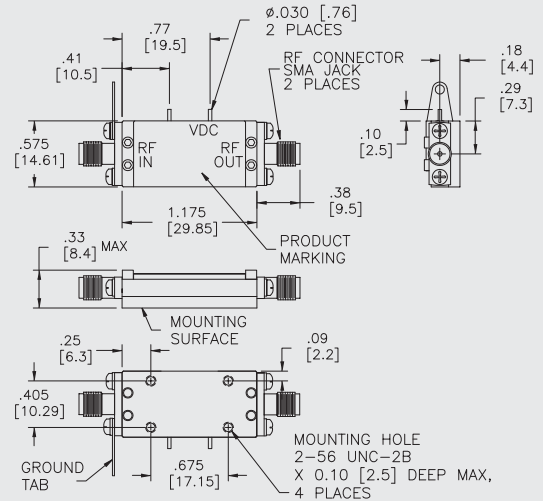
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+105 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+20 dBm
Maximum Short Term Input Power (1 Minute Max.)	125 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+85 °C
Thermal Resistance ¹ (θjc)	+37 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+66.8 °C

¹ Thermal resistance is based on total power dissipation.

A2CP5121

CougarPak™ Connectorized Package (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]