

A2CP6120

1000 TO 6000 MHz COUGARPAK™ AMPLIFIER

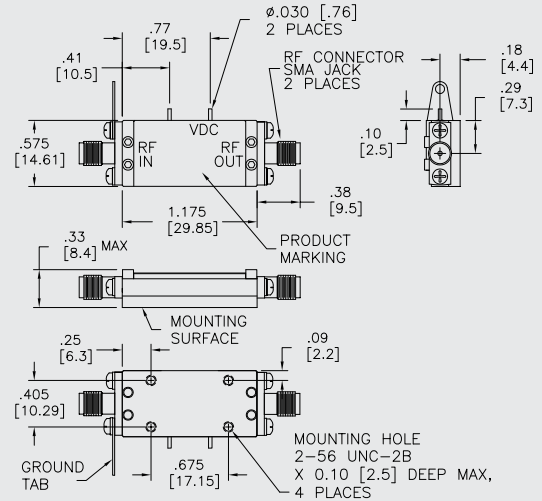
Typical Values

High Gain	29.0 dB
Low Noise Figure	4.5 dB
High Output Level	+21.0 dBm
High Reverse Isolation	70 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.)	500-6000 MHz	1000-6000 MHz	1000-6000 MHz
Small Signal Gain (Min.)	29.0 dB	27.0 dB	25.0 dB
Gain Flatness (Max.)	±0.6 dB	±0.8 dB	±1.2 dB
Noise Figure (Max.) 1000-6000 MHz	4.5 dB	5.5 dB	6.0 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+21.0 dBm	+19.0 dBm	18.5 dBm
Reverse Isolation	70 dB	—	—
DC Current (Max.)	240 mA	260 mA	270 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	+60 dBm
Second Order Two Tone Intercept Point	+54 dBm
Third Order Two Tone Intercept Point	+31 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+135 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+13 dBm
Maximum Short Term Input Power (1 Minute Max.)	50 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+105 °C
Thermal Resistance (θjc)	+130 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+40 °C

DIMENSIONS ARE IN INCHES [MILLIMETERS]