

A2CP16216 6.0-16.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	A2CP16216
High Gain	20.0 dB
High Reverse Isolation	35 dB
Ultra Broad Bandwidth	6.0-16.0 GHz
Low Noise	3.5 dB
High Performance Thin Film High Frequency Two-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	6.0-16.0 GHz	6.0-16.0 GHz	6.0-16.0 GHz
Small Signal Gain (Min.)	20.0 dB	18.7 dB	17.5 dB
Gain Flatness (Max.)	±1.2 dB	±1.5 dB	±1.5 dB
Noise Figure (Max.)	3.5 dB	4.2 dB	5.0 dB
SWR (Max.) Input/Output	1.8:1	2.0:1	2.0:1
Power Output (Min.) @ 1dB comp.	+15.3 dBm	+14.0 dBm	+13.5 dBm
Reverse Isolation	35 dB	—	—
DC Current (Max.)	125 mA	135 mA	145 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	A2CP16216
Second Order Harmonic Intercept Point	+43 dBm
Second Order Two Tone Intercept Point	+37 dBm
Third Order Two Tone Intercept Point	+25 dBm

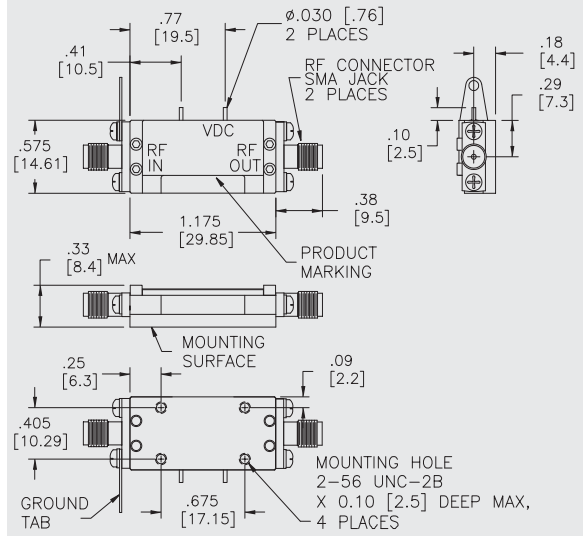
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+14 Volts
Maximum Continuous RF Input Power	+19 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 μsec Max.)	1.0 Watt
Burn-in Temperature	+125 °C
Thermal Resistance ¹ (θjc)	— °C/Watt
Junction Temperature Rise Above Case (Tjc)	— °C

¹ Thermal resistance is based on total power dissipation.

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High Frequency CougarPak™ SMA Package (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]