

A3CP7029 3.0-7.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	A3CP7029
High Gain	28.0 dB
High Output Power	0.5 Watt
Low Noise	3.3 dB
High Reverse Isolation	48 dB
Ultra Broad Bandwidth	3.0-7.0 GHz
High Performance Thin Film Standard Three-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed		
		0 to 50 °C	-55 to +85 °C	3.0-7.0 GHz
Frequency (Min.)	3.0-7.0 GHz	3.0-7.0 GHz	3.0-7.0 GHz	3.0-7.0 GHz
Small Signal Gain (Min.)	28.0 dB	26.5 dB	25.5 dB	
Gain Flatness (Max.)	±0.8 dB	±1.0 dB	±1.2 dB	
Noise Figure (Max.)	3.3 dB	4.0 dB	4.5 dB	
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1	
Power Output (Min.) @ 1dB comp.	+27.5 dBm	+26.5 dBm	+26.0 dBm	
Reverse Isolation	48 dB	—	—	
DC Current (Max.)	425 mA	440 mA	460 mA	

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	A3CP7029
Second Order Harmonic Intercept Point	+61 dBm
Second Order Two Tone Intercept Point	+55 dBm
Third Order Two Tone Intercept Point	+35 dBm

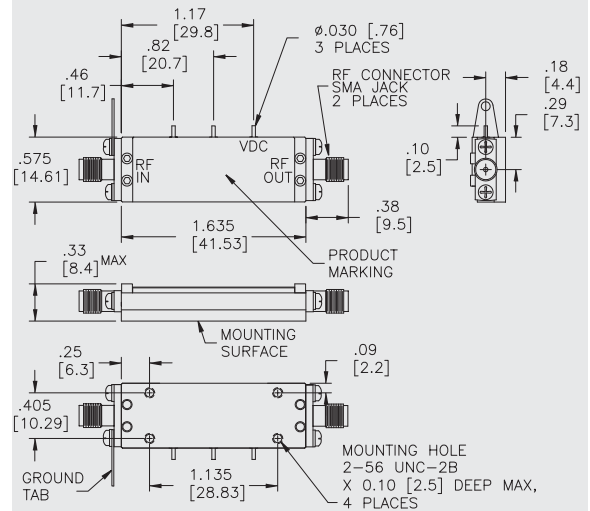
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+15 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 (θ _{jc})	— °C/Watt
Junction Temperature Rise Above Case (T _{jc})	— °C

¹ Thermal resistance is based on total power dissipation.

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CougarPak™ Connectorized Package (three-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]