

A3CP8049

2.0-8.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	A3CP8049
High Output Level	+29.0 dBm
High Gain	22.5 dB
High Third Order I.P.	+36 dBm
High Reverse Isolation	45 dB
High Performance Thin Film Standard Three-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed		
		0 to 50 °C	-55 to +85 °C	
Frequency (Min.)	2.0-8.0 GHz	2.0-8.0 GHz	2.0-8.0 GHz	
Small Signal Gain (Min.)	22.5 dB	21.5 dB	20.5 dB	
Gain Flatness (Max.)	±0.8 dB	±1.0 dB	±1.2 dB	
Noise Figure (Max.)	2.0-4.0 GHz	8.5 dB	9.0 dB	9.5 dB
	4.0-8.0 GHz	4.4 dB	5.0 dB	5.5 dB
SWR (Max.)	Input/Output	1.8:1	2.0:1	2.1:1
Power Output (Min.) @ 1dB comp.	2.0-4.0 GHz	+26.0 dBm	+23.0 dBm	+24.0 dBm
	4.0-8.0 GHz	+29.0 dBm	+28.0 dBm	+27.0 dBm
Reverse Isolation	45 dB	—	—	
DC Current (Max.)	550 mA	580 mA	610 mA	

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C; 4.0 - 8.0 GHz	A3CP8049
Second Order Harmonic Intercept Point	+58 dBm
Second Order Two Tone Intercept Point	+52 dBm
Third Order Two Tone Intercept Point	+36 dBm

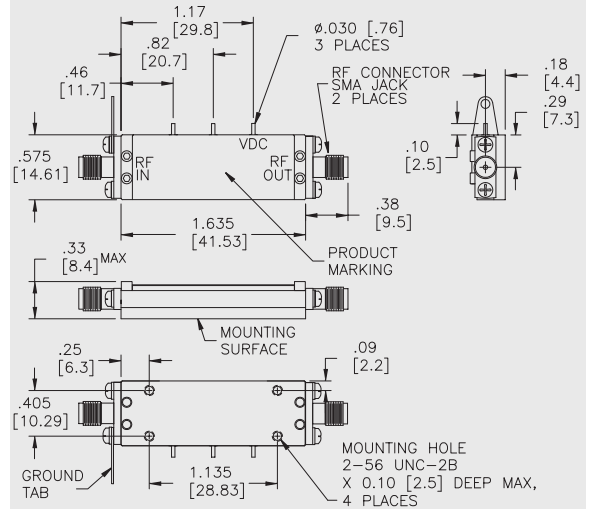
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-65 to +150 °C
Maximum Case Temperature	+85 °C
Maximum DC Voltage	+13 Volts
Maximum Continuous RF Input Power	+18 dBm
Maximum Short Term Input Power (1 Minute Max.)	+22 dBm
Maximum Peak Power (3 μsec Max.)	+25 dBm
Burn-in Temperature	+85 °C
Thermal Resistance ¹ (θjc)	+12.6 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+82.2 °C

¹ Thermal resistance is based on total power dissipation.

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CougarPak™ Connectorized Package (three-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]