

A3CP8027 3.0-8.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	A3CP8027
High Output Power	21.0 dBm
Low Noise	4.0 dB
High Reverse Isolation	50 dB
Ultra Broad Bandwidth	3.0-8.0 GHz
High Performance Thin Film Standard Three-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	3.0-8.0 GHz	3.0-8.0 GHz	3.0-8.0 GHz
Small Signal Gain (Min.)	23.0 dB	22.0 dB	21.3 dB
Gain Flatness (Max.)	±1.0 dB	±1.25 dB	±1.4 dB
Noise Figure (Max.)	4.0 dB	5.0 dB	5.5 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.			
3000-6000 MHz	+18.0 dBm	+17.0 dBm	+16.5 dBm
6000-8000 MHz	+21.0 dBm	+20.0 dBm	+19.5 dBm
Reverse Isolation	50 dB	—	—
DC Current (Max.)	225 mA	240 mA	255 mA

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

INTERMODULATION PERFORMANCE

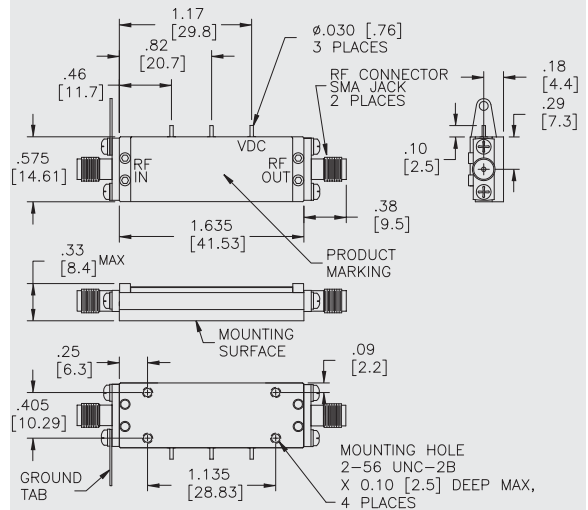
Typical @ 25 °C	A3CP8027
Second Order Harmonic Intercept Point	+54 dBm
Second Order Two Tone Intercept Point	+48 dBm
Third Order Two Tone Intercept Point	+32 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+105 °C
Maximum DC Voltage	+14 Volts
Maximum Continuous RF Input Power	+22 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 µsec Max.)	1.0 Watt
Burn-in Temperature	+60 °C
Thermal Resistance (θjc)	134.6 °C/Watt
Junction Temperature Rise Above Case (Tjc)	70 °C

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CougarPak™ Connectorized Package (three-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]