

A3CP2123

10 TO 2000 MHz COUGARPAK™ AMPLIFIER

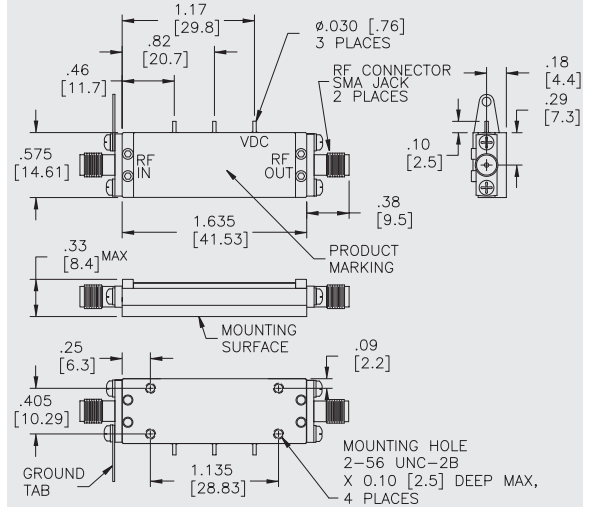
Typical Values

High Gain	42.0 dB
Low Noise Figure	3.1 dB
High Output Level	+23.5 dBm
High Third Order I.P.	+33 dBm
High Reverse Isolation	53 dB
High Performance Thin Film	
Standard Three-stage CougarPak™ Package	

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CougarPak™ Connectorized Package (three-stage)



SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	5-2100 MHz	10-2000 MHz	10-2000 MHz
Small Signal Gain (Min.)	42.0 dB	38.0 dB	36.0 dB
Gain Flatness (Max.)	±0.7 dB	±0.9 dB	±1.2 dB
Noise Figure (Max.) 100-2000 MHz	3.1 dB	3.7 dB	4.2 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+23.5 dBm	+22.5 dBm	+22.0 dBm
Reverse Isolation	53 dB	—	—
DC Current (Max.)	233 mA	245 mA	253 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	+56 dBm
Second Order Two Tone Intercept Point	+50 dBm
Third Order Two Tone Intercept Point	+33 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	-1 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 Resistance¹ (θjc)	+21 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+39.5 °C

¹ Thermal resistance is based on total power dissipation.

DIMENSIONS ARE IN INCHES [MILLIMETERS]