

A3CP3125

10 TO 3000 MHz COUGARPAK™ AMPLIFIER

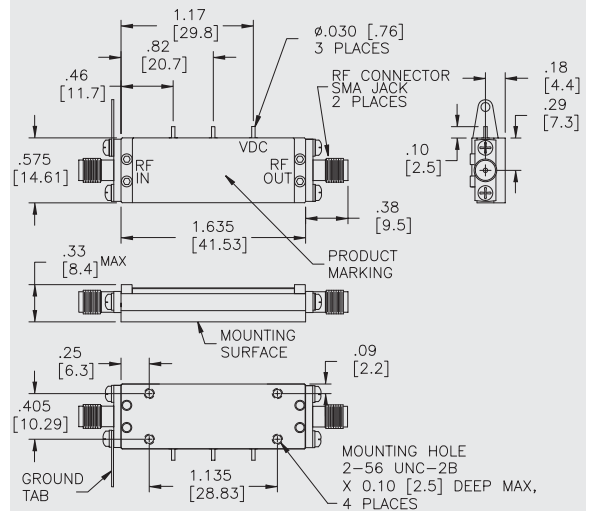
Typical Values

High Gain	33.0 dB
High Output Level	+25.5 dBm
High Third Order I.P.	+39 dBm
High Reverse Isolation	52 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.)	5-3000 MHz	10-3000 MHz	10-3000 MHz
Small Signal Gain (Min.)	33.0 dB	31.0 dB	29.0 dB
Gain Flatness (Max.)	10-3000 MHz	±1.0 dB	±2.0 dB
	1000-3000 MHz	±0.6 dB	±0.8 dB
Noise Figure (Max.)	200-1000 MHz	3.8 dB	5.5 dB
	1000-3000 MHz	3.8 dB	4.0 dB
SWR (Max.)	Input/Output	1.7:1	2.2:1
Power Output (Min.) @ 1dB comp.	+25.5 dBm	+24.5 dBm	24.0 dBm
Reverse Isolation	52 dB	—	—
DC Current (Max.)	301 mA	325 mA	335 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	+58 dBm
Second Order Two Tone Intercept Point	+52 dBm
Third Order Two Tone Intercept Point	+39 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+105 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	-2.0 dBm
Maximum Short Term Input Power (1 Minute Max.)	50 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+85 °C
Thermal Resistance¹ (θjc)	+23 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+56.8 °C

¹ Thermal resistance is based on total power dissipation.

DIMENSIONS ARE IN INCHES [MILLIMETERS]