

A2CP2520

100 TO 2500 MHz COUGARPAK™ AMPLIFIER

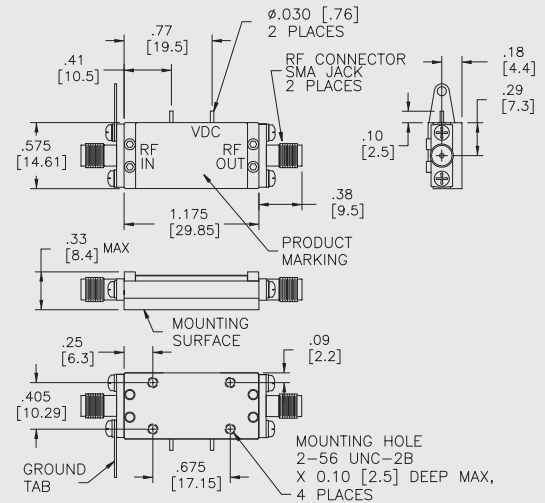
Typical Values

High Gain	36.0 dB
Low Noise Figure	3.2 dB
High Output Level	0.5 Watt
High Third Order I.P.	+40 dBm
High Reverse Isolation	63 dB
High Performance Thin Film	
Standard Two-stage CougarPak™ Package	

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CougarPak™ Connectorized Package (two-stage)



SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	50-2500 MHz	100-2500 MHz	100-2500 MHz
Small Signal Gain (Min.)	36.0 dB	33.0 dB	32.0 dB
Gain Flatness (Max.)	±0.7 dB	±1.0 dB	±1.2 dB
Noise Figure (Max.)	3.5 dB	4.5 dB	5.0 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	63 dB	—	—
DC Current (Max.)	363 mA	370 mA	392 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.
† Indicates minimum temperature at -55/+71 °C.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

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Second Order Harmonic Intercept Point	+59 dBm
Second Order Two Tone Intercept Point	+53 dBm
Third Order Two Tone Intercept Point	+38 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+115 °C
Maximum DC Voltage	+16 Volts
Maximum Continuous RF Input Power	-4 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)	+14 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+60.0 °C

¹ Thermal resistance is based on total power dissipation.

DIMENSIONS ARE IN INCHES [MILLIMETERS]