

# A2CP3527 100 TO 3500 MHz COUGARPAK™ AMPLIFIER

Typical Values	A2CP3527
High Gain .....	28.5 dB
Low Noise Figure .....	3.5 dB
High Output Level .....	+27.0 dBm
High Reverse Isolation .....	50 dB
High Performance Thin Film Standard Two-stage CougarPak™ Package	

## SPECIFICATIONS\*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	50-3500 MHz	100-3500 MHz	100-3500 MHz
Small Signal Gain (Min.)	28.5 dB	26.5 dB	24.0 dB
Gain Flatness (Max.)	±0.6 dB	±0.8 dB	±1.0 dB
Noise Figure (Max.) 500-3500	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. 100-3200 MHz 3200-3500MHz	+27.0 dBm +25.5 dBm	+26.0 dBm +25.0 dBm	25.5 dBm 24.5 dBm
Reverse Isolation	50 dB	—	—

\* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.

## INTERMODULATION PERFORMANCE

Typical @ 25 °C	A2CP3527
Second Order Harmonic Intercept Point .....	+48 dBm
Second Order Two Tone Intercept Point .....	+42 dBm
Third Order Two Tone Intercept Point .....	+36 dBm

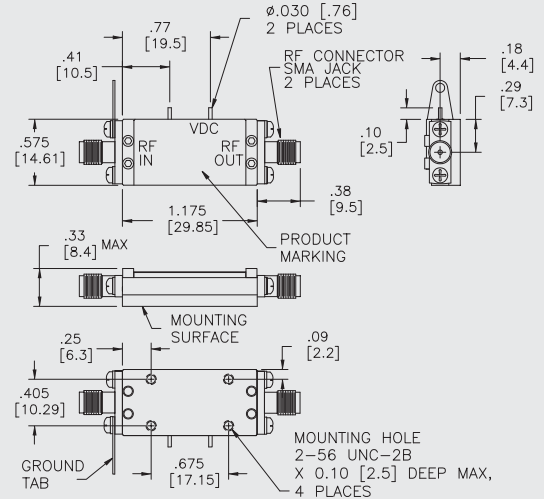
## ABSOLUTE MAXIMUM RATINGS

Storage Temperature .....	-62 to +125 °C
Maximum Case Temperature .....	+110 °C
Maximum DC Voltage .....	+17 Volts
Maximum Continuous RF Input Power .....	+6 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 Resistance <sup>1</sup> (θjc) .....	+15 °C/Watt
Junction Temperature Rise Above Case (Tjc) .....	+63.9 °C

<sup>1</sup> Thermal resistance is based on total power dissipation.

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### CougarPak™ Connectorized Package (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]