

A2CP6239

2000-6000 MHz COUGARPAK™ 2W POWER AMPLIFIER

Typical Values	A2CP6239
Noise Figure	4.0 dB
Gain	20.0 dB
Gain Flatness	±1.0 dB
Output Power	+32.0 dBm
High Performance Thin Film Standard Two-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	2000-6000 MHz	2000-6000 MHz	2000-6000 MHz
Small Signal Gain (Min.)	20.0 dB	19.0 dB	18.5 dB
Gain Flatness (Max.)	±1.0 dB	±1.25 dB	±1.5 dB
Noise Figure (Max.)	4.0 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.			
2.0 - 2.5 GHz	+31.5 dBm	+31.0 dBm	+30.5 dBm
2.5 - 6.0 GHz	+32.0 dBm	+31.5 dBm	+31.0 dBm
Power Output (Min.) @ Saturation			
2.0 - 2.5 GHz	+32.5 dBm	+32.0 dBm	+31.5 dBm
2.5 - 6.0 GHz	+33.0 dBm	+32.5 dBm	+32.0 dBm
Reverse Isolation	>40 dB	33 dB	33 dB
DC Current (Max.)	800 mA	850 mA	900 mA

* Measured in a 50-ohm system at +10 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C	A2CP6239
Second Order Harmonic Intercept Point	+63 dBm
Second Order Two Tone Intercept Point	+57 dBm
Third Order Two Tone Intercept Point	+42 dBm

ABSOLUTE MAXIMUM RATINGS

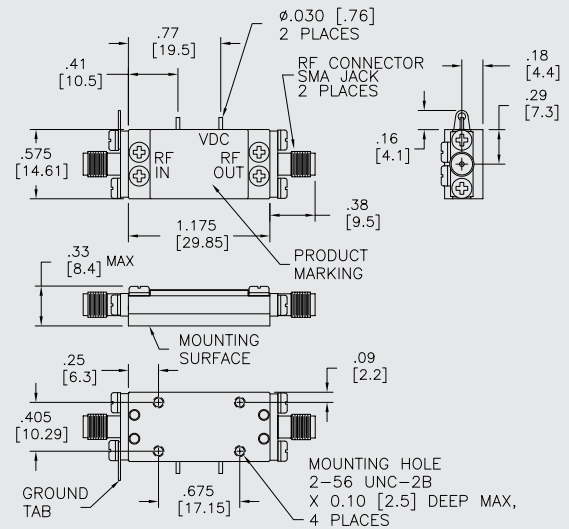
Storage Temperature	-55 to +125 °C
Maximum Case Temperature	+110 °C
Maximum DC Voltage	+14 Volts
Maximum Continuous RF Input Power	+15 dBm
Burn-in Temperature	110 °C
Thermal Resistance ¹ (θjc)	63/34 °C/Watt
Junction Temperature Rise Above Case ² (Tjc)	31.4/79.3 °C

¹ Thermal resistance of 1st stage and 2nd stage

² Junction Temperature Rise above Case of 1st stage and 2nd stage

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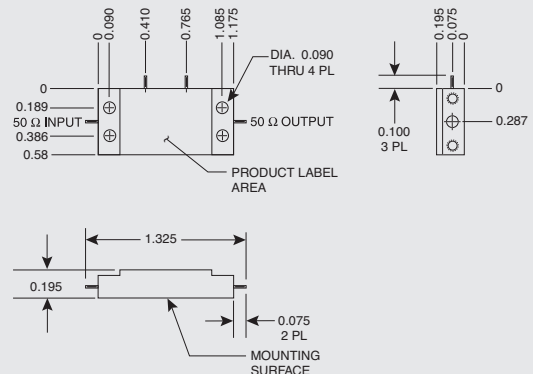
CougarPak™ Connectorized Package (two-stage)



Package only sold with SMA connectors and base mounting plate; both can be removed. Pin package for reference only.

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CougarPak™ Pin Package (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]