

A2P2589

100 TO 2500 MHz SMA CASCADED AMPLIFIER

Typical Values

High Output Power	A2P2589
High Gain	+28.3 dBm
Low Noise Figure	20.5 dB
High Performance Thin Film	< 3.4 dB
Power Pack SMA Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	50-2700 MHz	100-2500 MHz	100-2500 MHz
Small Signal Gain (Min.)	20.5 dB	19.0 dB	18.5 dB
Gain Flatness (Max.)	< ±0.4 dB	±0.7 dB	±0.8 dB
Noise Figure (Max.)	< 3.4^ dB	4.0^ dB	4.5^ dB
SWR (Max.)	Input/Output	1.8:1	1.9:1
Power Output (Min.) @ 1dB comp.	+28.3† dBm	+27.5† dBm	+27.0† dBm
DC Current (Max.)	283 mA	300 mA	310 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.
^ 3.5 dB higher below 200 MHz. † 0.5 dBm lower at 2500 MHz.

INTERMODULATION PERFORMANCE

A2P2589 Typical @ 25 °C	+12 volts	+15 volts
Second Order Harmonic Intercept Point	+59 dBm	+61 dBm
Second Order Two Tone Intercept Point	+53 dBm	+55 dBm
Third Order Two Tone Intercept Point	+39 dBm	+39 dBm

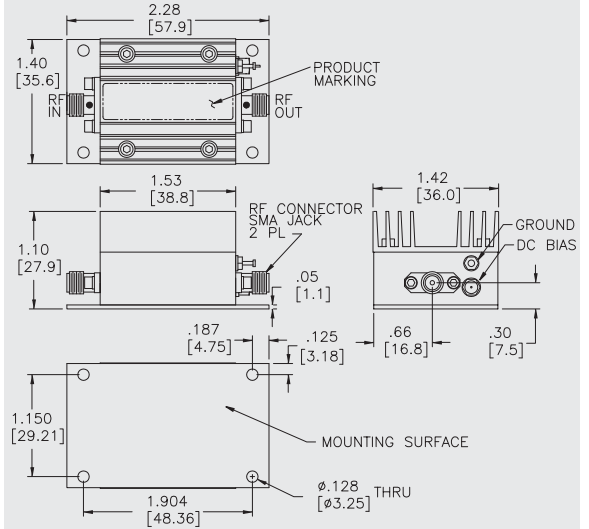
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+17 dBm
Maximum Short Term Input Power (1 Minute Max.)	125 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+100 °C
Thermal Resistance ¹ (θjc; Vcc = 15)	+14 °C/Watt
Junction Temperature Rise Above Case (Tjc; Vcc = 15)	+61 °C

¹Thermal resistance is based on total power dissipation.

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Power Pack SMA Case (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]