

# A2P2127

# 10 TO 2000 MHz SMA CASCADED AMPLIFIER

*Typical Values*

<b>High Gain</b> .....	<b>A2P2127</b>
<b>Low Noise Figure</b> .....	<b>22.0 dB</b>
<b>High Output Level</b> .....	<b>3.3 dB</b>
<b>High Third Order I.P.</b> .....	<b>+27.0 dBm</b>
<b>High Reverse Isolation</b> .....	<b>+39 dBm</b>
<b>High Performance Thin Film</b>	<b>37 dB</b>
<b>Two-stage SMA Package</b>	

## SPECIFICATIONS\*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	5-2100 MHz	10-2000 MHz	10-2000 MHz
Small Signal Gain (Min.)	22.0 dB	20.0 dB	18.5 dB
Gain Flatness (Max.)	±0.5 dB	±0.9 dB	±1.0 dB
Noise Figure (Max.) 100-2000 MHz	3.3 dB	3.8 dB	4.3 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.01
Power Output (Min.) @ 1dB comp.	+27.0 dBm	+25.5 dBm	+25.0 dBm
Reverse Isolation	37 dB	—	—
DC Current (Max.)	315 mA	330 mA	340 mA

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

## INTERMODULATION PERFORMANCE

*Typical @ 25 °C*

<b>Second Order Harmonic Intercept Point</b> .....	<b>A2P2127</b>
<b>Second Order Two Tone Intercept Point</b> .....	<b>+53 dBm</b>
<b>Third Order Two Tone Intercept Point</b> .....	<b>+47 dBm</b>
	<b>+39 dBm</b>

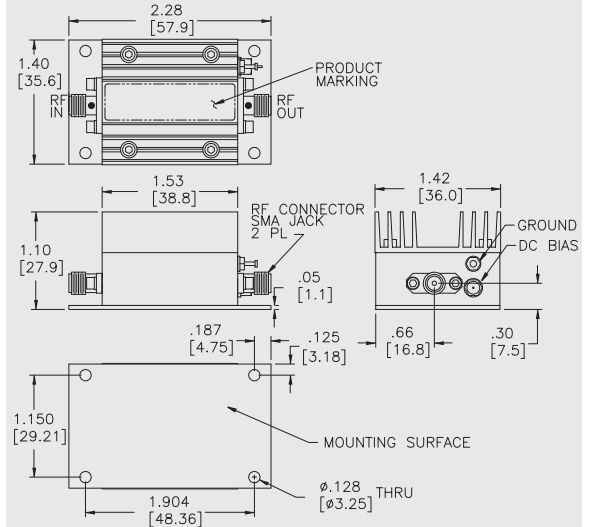
## ABSOLUTE MAXIMUM RATINGS

<b>Storage Temperature</b> .....	-62 to +125 °C
<b>Maximum Case Temperature</b> .....	+105 °C
<b>Maximum DC Voltage</b> .....	+17 Volts
<b>Maximum Continuous RF Input Power</b> .....	+10 dBm
<b>Maximum Short Term Input Power (1 Minute Max.)</b> .....	100 Milliwatts
<b>Maximum Peak Power (3 μsec Max.)</b> .....	0.5 Watt
<b>Burn-in Temperature</b> .....	+85 °C
<b>Thermal Resistance<sup>1</sup> (θjc)</b> .....	+24 °C/Watt
<b>Junction Temperature Rise Above Case (Tjc)</b> .....	+69.3 °C

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

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### Power Pack SMA Case (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]