

A4P3129

100 TO 3000 MHz SMA CASCADED AMPLIFIER

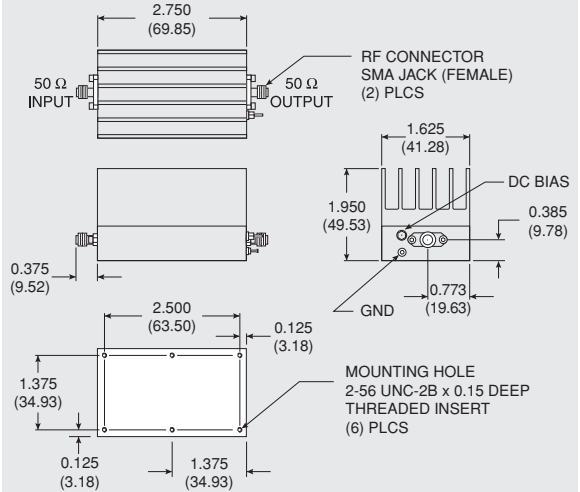
Typical Values

High Gain	29.0 dB
Low Noise Figure	3.5 dB
High Output Level	+29.0 dBm
High Third Order I.P.	+37 dBm
High Reverse Isolation	50 dB
High Performance Thin Film	
Power Pack SMA Package	

A4P3129

A4P3129

**Power Pack SMA Case
(three- and four-stage)**



SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	50-3100 MHz	100-3000 MHz	100-3000 MHz
Small Signal Gain (Min.)	29.0 dB	27.0 dB	25.0 dB
Gain Flatness (Max.)	±0.6 dB	±0.8 dB	±1.0 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.	+29.0 dBm	+28.3 dBm	+27.8† dBm
Reverse Isolation	50 dB	—	—
DC Current (Max.)	560 mA	575 mA	590 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

A4P3129

Second Order Harmonic Intercept Point	+46 dBm
Second Order Two Tone Intercept Point	+40 dBm
Third Order Two Tone Intercept Point	+37 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	+13 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)	+9 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+54.4 °C

¹ Thermal resistance is based on total power dissipation.

DIMENSIONS ARE IN INCHES [MILLIMETERS]