TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

A2P2128

50 TO 2000 MHz SMA CASCADED AMPLIFIER

Typical Values	***A2P2128***
High Gain	***27.0 dB***
Low Noise Figure	***3.2 dB***
High Output Level	***0.5 Watt***
High Third Order I.P.	***+39 dBm***
High Reverse Isolation	***49 dB***

High Performance Thin Film
Power Pack SMA Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	**30-2100 MHz**	**50-2000 MHz**	**50-2000 MHz**
Small Signal Gain (Min.)	27.0 dB	25.0 dB	23.5 dB
Gain Flatness (Max.)	±0.5 dB	±0.7 dB	±1.0 dB
Noise Figure (Max.)	3.2 dB	3.7 dB	4.2 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+27.5 dBm	+26.3 dBm	+25.8 dBm
Reverse Isolation	49 dB	—	—
DC Current (Max.)	340 mA	355 mA	365 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	***A2P2128***
Second Order Harmonic Intercept Point	+58 dBm
Second Order Two Tone Intercept Point	+52 dBm
Third Order Two Tone Intercept Point	+39 dBm

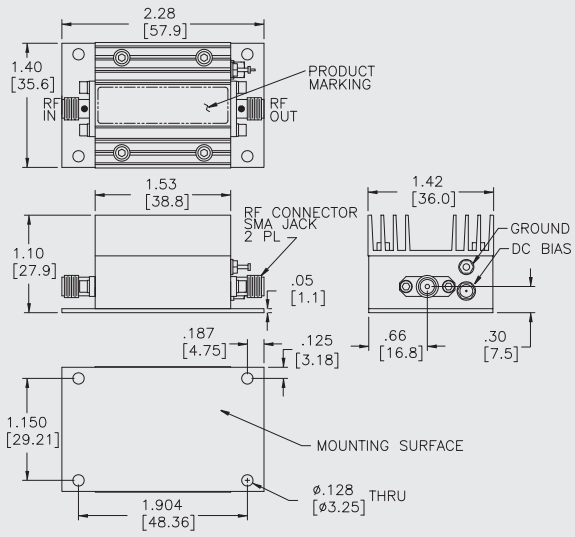
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+115 °C
Maximum DC Voltage	+16 Volts
Maximum Continuous RF Input Power	+15 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[1] (θjc)	+14 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+60.0 °C

[1] Thermal resistance is based on total power dissipation.

A2P2128

Power Pack SMA Case
(two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]