TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

A2CP2127 10 TO 2000 MHz COUGARPAK™ AMPLIFIER

Typical Values	A2CP2127
High Gain	22.0 dB
Low Noise Figure	3.3 dB
High Output Level	+27.0 dBm
High Third Order I.P.	+39 dBm
High Reverse Isolation	37 dB

High Performance Thin Film
Standard Two-stage CougarPak™ Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -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	A2CP2127
Second Order Harmonic Intercept Point	+53 dBm
Second Order Two Tone Intercept Point	+47 dBm
Third Order Two Tone Intercept Point	+39 dBm

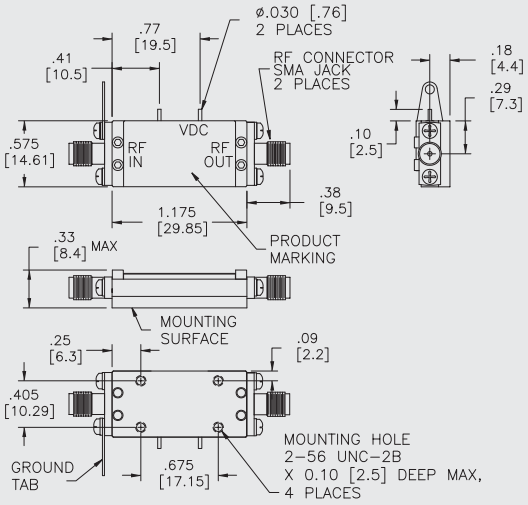
ABSOLUTE MAXIMUM RATINGS

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

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

A2CP2127

CougarPak™ Connectorized Package (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]