TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

A2CP18221 10.0-18.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	A2CP18221
High Power Output	**+23.5 dBm**
High Reverse Isolation	**35 dB**
Ultra Broad Bandwidth	**10.0-18.0 GHz**

High Performance Thin Film
High Frequency Two-stage CougarPak™ Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	**10.0-18.0 GHz**	**10.0-18.0 GHz**	**10.0-18.0 GHz**
Small Signal Gain (Min.)	17.5 dB	16.5 dB	16.0 dB
Gain Flatness (Max.)	±1.2 dB	±1.5 dB	±1.5 dB
Noise Figure (Max.)	4.4 dB	5.7 dB	7.5 dB
SWR (Max.) Input/Output	1.8:1	2.0:1	2.0:1
Power Output (Min.) @ 1dB comp.	+23.5 dBm	+21.5 dBm	+21.0 dBm
Reverse Isolation	35 dB	—	—
DC Current (Max.)	185 mA	190 mA	195 mA

* Measured in a 50-ohm system at +12 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C	A2CP18221
Second Order Harmonic Intercept Point	+47 dBm
Second Order Two Tone Intercept Point	+41 dBm
Third Order Two Tone Intercept Point	+30 dBm

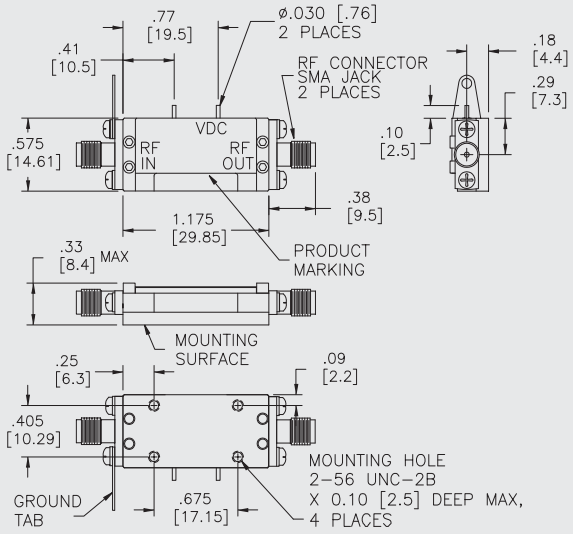
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+14 Volts
Maximum Continuous RF Input Power	+19 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 µsec Max.)	1.0 Watt
Burn-in Temperature	+125 °C
Thermal Resistance[1] (θjc)	— °C/Watt
Junction Temperature Rise Above Case (Tjc)	— °C

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

A2CP18221

High Frequency CougarPak™ SMA Package (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]