

ACP18021 10.0-18.0 GHz COUGARPAK™ AMPLIFIER

Typical Values **ACP18021**
High Output Power +23.5 dBm
Ultra Broad Bandwidth 10.0-18.0 GHz
High Performance Thin Film
High Frequency Single-stage CougarPak™ Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-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.)	9.5 dB	8.0 dB	7.5 dB
Gain Flatness (Max.)	±0.8 dB	±1.0 dB	±1.0 dB
Noise Figure (Max.)	4.0 dB	5.7 dB	6.2 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	20 dB	—	—
DC Current (Max.)	115 mA	120 mA	125 mA

* Measured in a 50-ohm system at +8.0 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C **ACP18021**
Second Order Harmonic Intercept Point +52 dBm
Second Order Two Tone Intercept Point +45 dBm
Third Order Two Tone Intercept Point +32 dBm

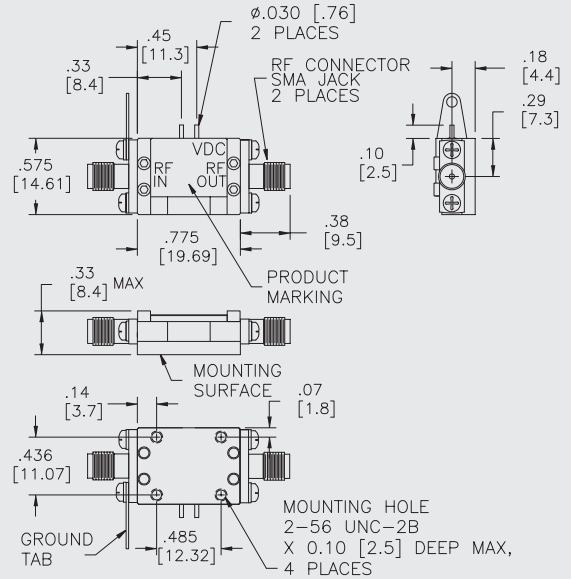
ABSOLUTE MAXIMUM RATINGS

Storage Temperature -65 to +150 °C
Maximum Case Temperature +125 °C
Maximum DC Voltage +12 Volts
Maximum Continuous RF Input Power +19 dBm
Maximum Short Term Input Power (1 Minute Max.) +22 dBm
Maximum Peak Power (3 μsec Max.) +27 dBm
Burn-in Temperature +125 °C
Thermal Resistance¹ (θjc) +25.8 °C/Watt
Junction Temperature Rise Above Case (Tjc) +23.73 °C

¹ Thermal resistance is based on total power dissipation.

ACP18021

High Frequency CougarPak™ SMA Package (single-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]