

ACP16016

6.0-16.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	ACP16016
Medium Output Power	+15.3 dBm
Ultra Broad Bandwidth	6.0-16.0 GHz
Low Noise	3.5 dB
High Performance Thin Film High Frequency Single-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	6.0-16.0 GHz	6.0-16.0 GHz	6.0-16.0 GHz
Small Signal Gain (Min.)	10.5 dB	9.5 dB	8.5 dB
Gain Flatness (Max.)	±0.7 dB	±1.0 dB	±1.0 dB
Noise Figure (Max.)	3.5 dB	4.5 dB	5.6 dB
SWR (Max.) Input/Output	1.8:1	2.0:1	2.0:1
Power Output (Min.) @ 1dB comp.	+15.3 dBm	+14.0 dBm	+13.5 dBm
Reverse Isolation	27 dB	—	—
DC Current (Max.)	65 mA	70 mA	75 mA

* Measured in a 50-ohm system at +5 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C	ACP16016
Second Order Harmonic Intercept Point	+44 dBm
Second Order Two Tone Intercept Point	+38 dBm
Third Order Two Tone Intercept Point	+24 dBm

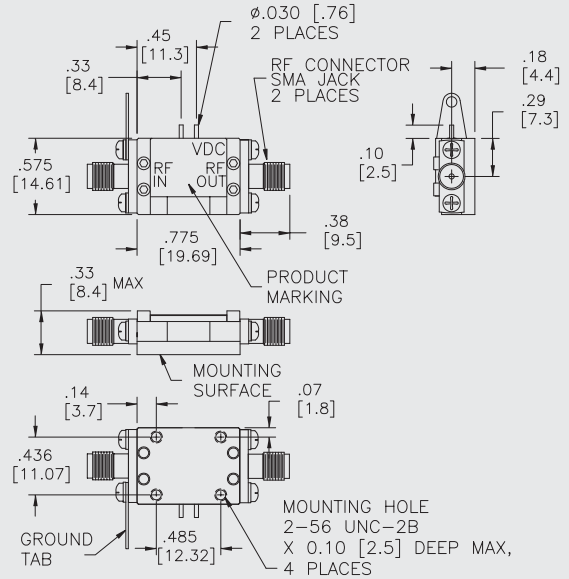
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-65 to +150 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+8.5 Volts
Maximum Continuous RF Input Power	+20 dBm
Maximum Short Term Input Power (1 Minute Max.)	+23 dBm
Maximum Peak Power (3 μsec Max.)	+29 dBm
Burn-in Temperature	+125 °C
Thermal Resistance ¹ (θjc)	+10.3 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+3.36 °C

¹ Thermal resistance is based on total power dissipation.

ACP16016

High Frequency CougarPak™ SMA Package (single-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]