

# ACP7019

## 3.0-7.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	ACP7019
High Output Power .....	0.5 Watt
Low Noise .....	3.6 dB
Ultra Broad Bandwidth .....	3.0-7.0 GHz
High Third Order Intercept .....	35 dB
High Performance Thin Film Standard Single-stage CougarPak™ Package	

### SPECIFICATIONS\*

Parameter	Typical	Guaranteed		
		0 to 50 °C	-55 to +85 °C	
Frequency (Min.)	3.0-7.0 GHz	3.0-7.0 GHz	3.0-7.0 GHz	
Small Signal Gain (Min.)	14.0 dB	13.2 dB	12.7 dB	
Gain Flatness (Max.)	±0.6 dB	±0.8 dB	±1.0 dB	
Noise Figure (Max.)	3.6 dB	4.5 dB	5.2 dB	
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1	
Power Output (Min.) @ 1dB comp.	+27.5 dBm	+26.5 dBm	+26.0 dBm	
DC Current (Max.)	250 mA	265 mA	280 mA	

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

### INTERMODULATION PERFORMANCE

Typical @ 25 °C	ACP7019
Second Order Harmonic Intercept Point .....	+61 dBm
Second Order Two Tone Intercept Point .....	+55 dBm
Third Order Two Tone Intercept Point .....	+35 dBm

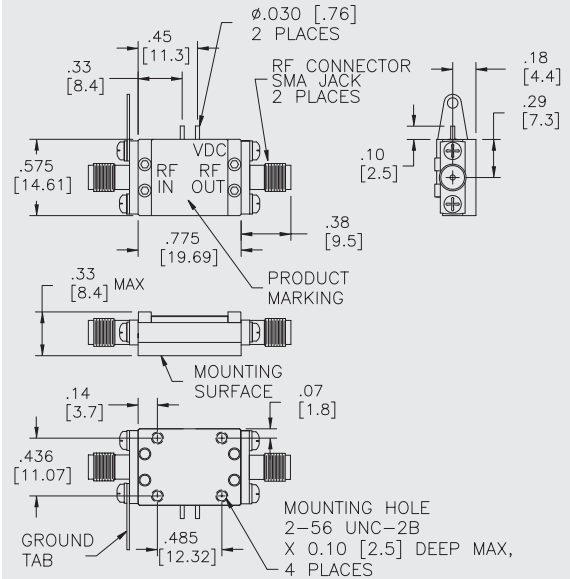
### ABSOLUTE MAXIMUM RATINGS

Storage Temperature .....	-62 to +125 °C
Maximum Case Temperature .....	+125 °C
Maximum DC Voltage .....	+17 Volts
Maximum Continuous RF Input Power .....	+22 dBm
Maximum Short Term Input Power (1 Minute Max.) .....	+25 dBm
Maximum Peak Power (3 μsec Max.) .....	+28 dBm
Burn-in Temperature .....	+125 °C
Thermal Resistance <sup>1</sup> (θ <sub>jc</sub> ) .....	— °C/Watt
Junction Temperature Rise Above Case (T <sub>jc</sub> ) .....	— °C

<sup>1</sup> Thermal resistance is based on total power dissipation.

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#### CougarPak™ Connectorized Package (single-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]