

# A2CP18216 8.0-18.0 GHz COUGARPAK™ AMPLIFIER

*Typical Values* **A2CP18216**  
**Medium Power Output** ..... +16.0 dBm  
**High Reverse Isolation** ..... 35 dB  
**Ultra Broad Bandwidth** ..... 8.0-18.0 GHz  
**High Performance Thin Film**  
**High Frequency Two-stage CougarPak™ Package**

## SPECIFICATIONS\*

Parameter	Typical	Guaranteed		
		0 to 50° C	-55 to +85° C	
Frequency (Min.)	8.0-18.0 GHz	8.0-18.0 GHz	8.0-18.0 GHz	
Small Signal Gain (Min.)	18.0 dB	17.2 dB	16.6 dB	
Gain Flatness (Max.)	±1.2 dB	±1.5 dB	±1.5 dB	
Noise Figure (Max.)	4.4 dB	5.7 dB	7.3 dB	
SWR (Max.) Input/Output	1.8:1	2.0:1	2.0:1	
Power Output (Min.) @ 1dB comp.	+16.0 dBm	+14.0 dBm	+12.0 dBm	
Reverse Isolation	35 dB	—	—	
DC Current (Max.)	125 mA	130 mA	135 mA	

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

## INTERMODULATION PERFORMANCE

*Typical @ 25° C* **A2CP18216**  
**Second Order Harmonic Intercept Point** ..... +40 dBm  
**Second Order Two Tone Intercept Point** ..... +34 dBm  
**Third Order Two Tone Intercept Point** ..... +22 dBm

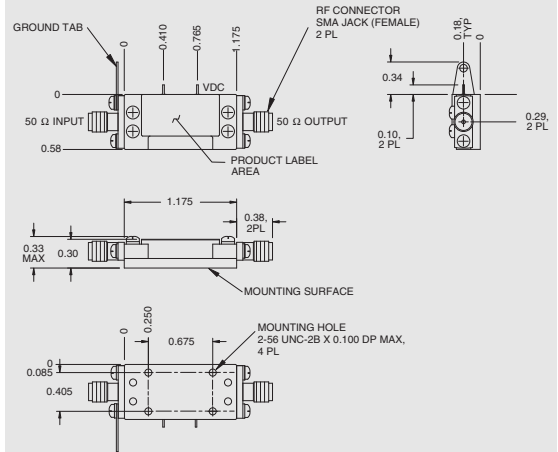
## ABSOLUTE MAXIMUM RATINGS

**Storage Temperature** ..... -62 to +125° C  
**Maximum Case Temperature** ..... +125° C  
**Maximum DC Voltage** ..... +17 Volts  
**Maximum Continuous RF Input Power** ..... +15 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<sup>1</sup> (θjc)** ..... —° C/Watt  
**Junction Temperature Rise Above Case (Tjc)** ..... —° C

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

## A2CP18216

### High Frequency CougarPak™ SMA Package (two-stage)



DIMENSIONS ARE IN INCHES