

ACP8036 2.0-8.0 GHz COUGARPAK™ AMPLIFIER

Typical Values

High Output Power	ACP8036
Ultra Broad Bandwidth	+25.5 dBm
High Third Order I.P.	2.0-8.0 GHz
High Performance Thin Film	+35 dBm
Standard Single-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed		
		0 to 50 °C	-55 to +85 °C	
Frequency (Min.)	2.0-8.0 GHz	2.0-8.0 GHz	2.0-8.0 GHz	
Small Signal Gain (Min.)	12.0 dB	11.0 dB	10.5 dB	
Gain Flatness (Max.)	±0.6 dB	±0.8 dB	±1.5 dB	
Noise Figure (Max.)	2-4 GHz 4-8 GHz	8.0 dB 4.2 dB	8.5 dB 4.8 dB	9.0 dB 5.3 dB
SWR (Max.)	Input/Output	1.8:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	2-3 GHz 3-8 GHz	+22.5 dBm +25.5 dBm	+22.0 dBm +24.0 dBm	+21.5 dBm +23.5 dBm
Reverse Isolation	28 dB	—	—	
DC Current (Max.)	150 mA	160 mA	170 mA	

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C

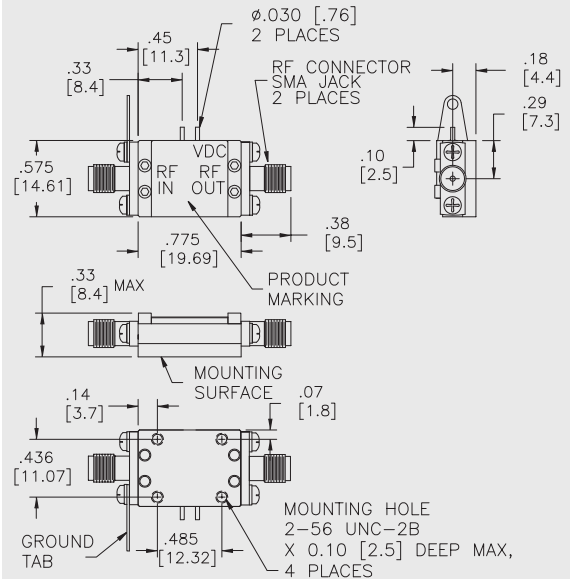
Second Order Harmonic Intercept Point	ACP8036
Second Order Two Tone Intercept Point	+58 dBm
Third Order Two Tone Intercept Point	+52 dBm
	+35 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-65 to +150 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+14 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 (θjc)	+68.8 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+44 °C

ACP8036

CougarPak™ Connectorized Package (single-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]