TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

ACP8037 2.0-8.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	ACP8037
High Output Power	**+28.0 dBm**
Ultra Broad Bandwidth	**2.0-8.0 GHz**
High Third Order I.P.	**+34 dBm**
High Performance Thin Film	
Standard Single-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter		Typical	Guaranteed 0 to 50 °C	Guaranteed -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	8.0 dB	8.5 dB	9.0 dB
	4-8 GHZ	4.2 dB	4.8 dB	5.3 dB
SWR (Max.)	Input/Output	1.8:1	2.0:1	2.0:1
Power Output (Min.) @ 1dB comp.	2-3 GHZ	+26.5 dBm	+26.0 dBm	+25.5 dBm
	3-8 GHZ	+28.0 dBm	+26.5 dBm	+26.0 dBm
Reverse Isolation		28 dB	—	—
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	ACP8037
Second Order Harmonic Intercept Point	+60 dBm
Second Order Two Tone Intercept Point	+50 dBm
Third Order Two Tone Intercept Point	+34 dBm

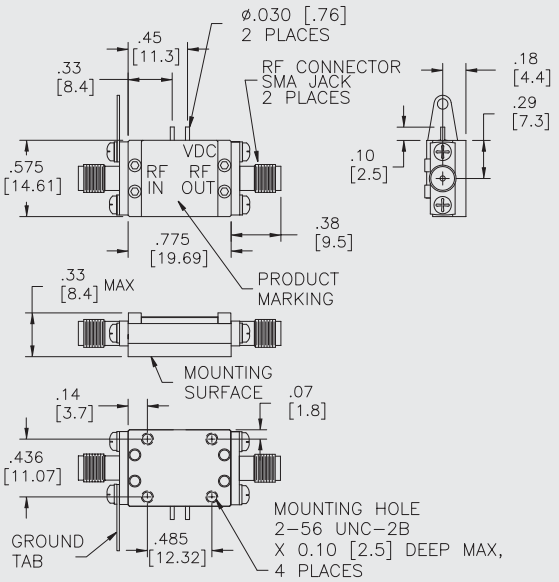
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-65 to +150 °C
Maximum Case Temperature	+85 °C
Maximum DC Voltage	+15 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	+85 °C
Thermal Resistance[1] (θjc)	20.3 °C/Watt
Junction Temperature Rise Above Case (Tjc)	61 °C

[1] Thermal resistance is based on total power dissipation.

ACP8037

CougarPak™ Connectorized Package (single-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]