TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

ACP18025 10.0-18.0 GHz COUGARPAK™ AMPLIFIER

Typical Values	ACP18025
High Output Power	+25.5 dBm
Ultra Broad Bandwidth	10.0-18.0 GHz
High Performance Thin Film	
High Frequency Single-stage CougarPak™ Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	10.0-18.0 GHz	10.0-18.0 GHz	10.0-18.0 GHz
Small Signal Gain (Min.)	6.5 dB	5.7 dB	5.2 dB
Gain Flatness (Max.)	±0.9 dB	±1.2 dB	±1.2 dB
Noise Figure (Max.)	5.0 dB	6.8 dB	7.6 dB
SWR (Max.) Input/Output	1.8:1	2.0:1	2.0:1
Power Output (Min.) @ 1dB comp.	+25.5 dBm	+24.0 dBm	+23.5 dBm
Reverse Isolation	20 dB	—	—
DC Current (Max.)	250 mA	260 mA	270 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	ACP18025
Second Order Harmonic Intercept Point	+51 dBm
Second Order Two Tone Intercept Point	+45 dBm
Third Order Two Tone Intercept Point	+36 dBm

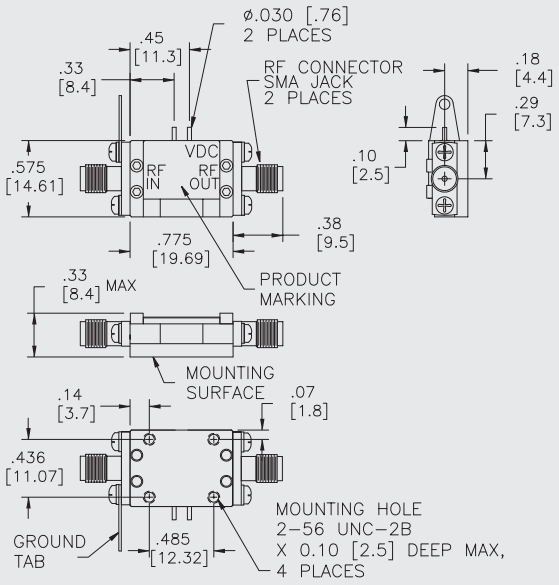
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-65 to +150 °C
Maximum Case Temperature	+85 °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	+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.

ACP18025

High Frequency CougarPak™ SMA Package (single-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]