

A2C5127

10 TO 500 MHz SMA CASCADED AMPLIFIER

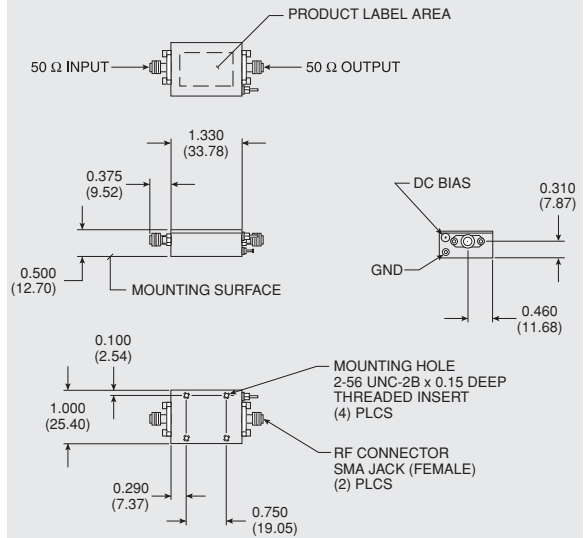
Typical Values

High Gain	26.5 dB
Low Noise Figure	2.5 dB
High Output Level	+27.0 dBm
High Third Order I.P.	+39 dBm
High Reverse Isolation	36 dB
High Performance Thin Film	
Two-stage SMA Package	

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T0-8 Amplifier SMA Case (two-stage)



SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	5-600 MHz	10-500 MHz	10-500 MHz
Small Signal Gain (Min.)	26.5 dB	25.0 dB	24.0 dB
Gain Flatness (Max.)	±0.5 dB	±0.7 dB	±0.9 dB
Noise Figure (Max.)	2.5 dB	3.5 dB	4.0 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+27.0 dBm	+25.0 dBm	+24.5 dBm
Reverse Isolation	36 dB	—	—
DC Current (Max.)	220 mA	227 mA	235 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

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Second Order Harmonic Intercept Point	+51 dBm
Second Order Two Tone Intercept Point	+45 dBm
Third Order Two Tone Intercept Point	+39 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	+2 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+100 °C
Thermal Resistance¹ (θjc)	+13 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+36.2 °C

¹ Thermal resistance is based on total power dissipation.

DIMENSIONS ARE IN INCHES [MILLIMETERS]