

A4C1222

10 TO 1000 MHz SMA CASCADED AMPLIFIER

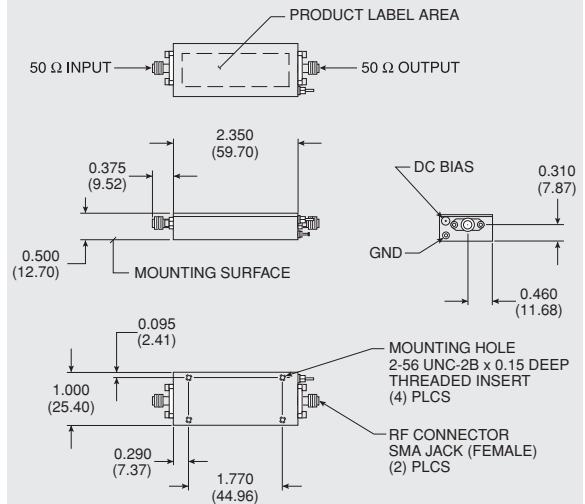
Typical Values

High Gain	46.0 dB
Low Noise Figure	3.6 dB
High Output Level	+22.0 dBm
High Third Order I.P.	+34 dBm
High Reverse Isolation	65 dB
High Performance Thin Film Four-stage SMA Package	

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**TO-8 Amplifier SMA Case
(three- and four-stage)**



SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	5-1100 MHz	10-1000 MHz	10-1000 MHz
Small Signal Gain (Min.)	46.0 dB	44.0 dB	42.0 dB
Gain Flatness (Max.)	±0.6 dB	±0.9 dB	±1.2 dB
Noise Figure (Max.)	3.6 dB	4.5 dB	5.0 dB
SWR (Max.) Input/Output	1.6:1	1.8:1	2.0:1
Power Output (Min.) @ 1dB comp.	+22.0 dBm	+20.0 dBm	+19.5 dBm
Reverse Isolation	65 dB	—	—
DC Current (Max.)	206 mA	213 mA	220 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	+48 dBm
Second Order Two Tone Intercept Point	+42 dBm
Third Order Two Tone Intercept Point	+34 dBm

ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+19 Volts
Maximum Continuous RF Input Power	+13 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)	+37 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+52.4 °C

¹ Thermal resistance is based on total power dissipation.

DIMENSIONS ARE IN INCHES [MILLIMETERS]