

A2C1221

10 TO 1000 MHz SMA CASCADED AMPLIFIER

Typical Values

High Gain	A2C1221	40.5 dB
Low Noise Figure		2.6 dB
High Output Level		+22.0 dBm
High Third Order I.P.		+33 dBm
High Reverse Isolation		55 dB
High Performance Thin Film		
Two-stage SMA Package		

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.)	40.5 dB	39.0 dB	37.0 dB
Gain Flatness (Max.)	±0.6 dB	±0.9 dB	±1.0 dB
Noise Figure (Max.)	2.6 dB	3.5 dB	4.0 dB
SWR (Max.) Input/Output	1.6:1	1.8:1	2.0:1
Power Output (Min.) @ 1dB comp.	+22.0 dBm	+19.7 dBm	+19.3 dBm
Reverse Isolation	55 dB	—	—
DC Current (Max.)	141 mA	146 mA	151 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C

Second Order Harmonic Intercept Point	A2C1221	+58 dBm
Second Order Two Tone Intercept Point		+52 dBm
Third Order Two Tone Intercept Point		+33 dBm

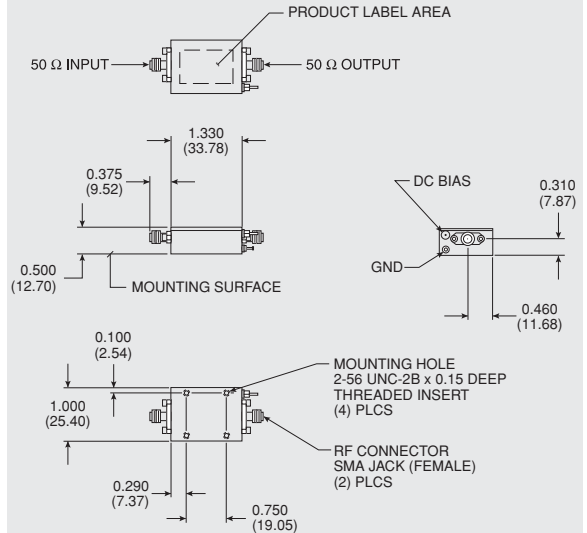
ABSOLUTE MAXIMUM RATINGS

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	+95 °C
Thermal Resistance¹ (θjc)	+28 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+56.7 °C

¹ Thermal resistance is based on total power dissipation.

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T0-8 Amplifier SMA Case (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]