

A2C5120

10 TO 800 MHz SMA CASCADED AMPLIFIER

Typical Values

High Gain	A2C5120	26.5 dB
Low Noise Figure		3.0 dB
High Output Level		+19.0 dBm
High Reverse Isolation		34 dB
High Performance Thin Film		
Two-stage SMA Package		

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	5-900 MHz	10-800 MHz	10-800 MHz
Small Signal Gain (Min.)	26.5 dB	25.0 dB	23.5 dB
Gain Flatness (Max.)	±0.5 dB	±0.7 dB	±0.9 dB
Noise Figure (Max.)	3.0 dB	4.0 [^] dB	4.5 [^] dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+19.0 dBm	+18.0 dBm	+17.5 dBm
Reverse Isolation	34 dB	—	—
DC Current (Max.)	102 mA	107 mA	112 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.
^ 0.5 dB higher above 600 MHz.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

Second Order Harmonic Intercept Point	A2C5120	+47 dBm
Second Order Two Tone Intercept Point		+41 dBm
Third Order Two Tone Intercept Point		+33 dBm

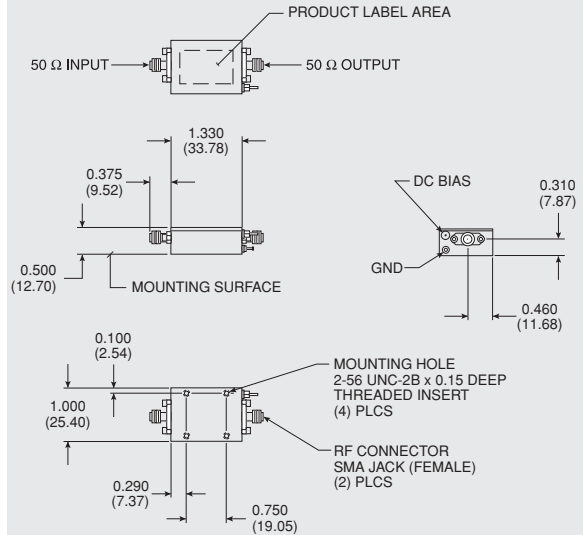
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+13 dBm
Maximum Short Term Input Power (1 Minute Max.)	50 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+85 °C
Thermal Resistance¹ (θjc)	+56 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+51.0 °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]