

A2C3110

10 TO 3000 MHz SMA CASCADED AMPLIFIER

Typical Values

High Gain	A2C3110
Low Noise Figure	19.0 dB
High Output Level	3.5 dB
High Second Order I.P.	+22.0 dBm
High Reverse Isolation	+43 dBm
High Performance Thin Film	33 dB
Two-stage SMA Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	5-3000 MHz	10-3000 MHz	10-3000 MHz
Small Signal Gain (Min.)	19.0 dB	17.5 dB	17.0 dB
Gain Flatness (Max.)	±0.7 dB	±1.0 dB	±1.2 dB
Noise Figure (Max.)	1.0-3.0 GHz 0.2-1.0 GHz	2.7 dB 3.5 dB	3.5 dB 5.0 dB 4.0 dB 5.5 dB
SWR (Max.)	Input/Output	1.7:1	1.9:1 2.0:1
Power Output (Min.) @ 1dB comp.		+22.0 dBm	+20.5 dBm +20.0 dBm
Reverse Isolation		33 dB	— —
DC Current (Max.)		172 mA	177 mA 182 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C

Second Order Harmonic Intercept Point	A2C3110
Second Order Two Tone Intercept Point	+49 dBm
Third Order Two Tone Intercept Point	+43 dBm
	+33 dBm

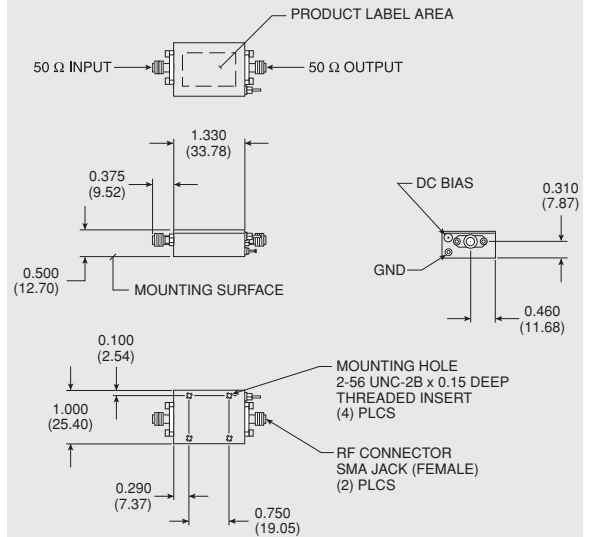
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+105 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+15 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.25 Watt
Burn-in Temperature	+85 °C
Thermal Resistance¹ (θjc)	+37 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+66.8 °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]