TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

A2C4110 100 TO 4000 MHz SMA CASCADED AMPLIFIER

Typical Values	***A2C4110***
High Gain	***16.8 dB***
Low Noise Figure	***5.2 dB***
High Output Level	***+21.5 dBm***
High Reverse Isolation	***33 dB***

High Performance Thin Film CougarPak™ SMA Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	**50-4000 MHz**	**100-4000 MHz**	**100-4000 MHz**
Small Signal Gain (Min.)	16.8 dB	15.0 dB	14.0 dB
Gain Flatness (Max.)	±0.7 dB	±1.0 dB	±1.2 dB
Noise Figure (Max.) 200-4000 MHz	5.2 dB	6.0 dB	6.5 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+21.5 dBm	+20.5 dBm	20.0 dBm
Reverse Isolation	33 dB	—	—
DC Current (Max.)	230 mA	240 mA	250 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	***A2C4110***
Second Order Harmonic Intercept Point	+62 dBm
Second Order Two Tone Intercept Point	+56 dBm
Third Order Two Tone Intercept Point	+36 dBm

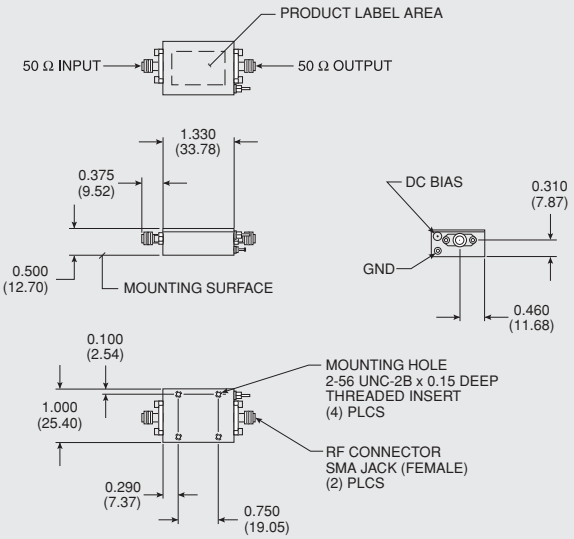
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+110 °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 Resistance[1] (θjc)	+18 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+55.3 °C

[1] Thermal resistance is based on total power dissipation.

A2C4110

T0-8 Amplifier SMA Case (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]