TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

A2C5119 10 TO 500 MHz SMA CASCADED AMPLIFIER

Typical Values	***A2C5119***
High Gain	***24.5 dB***
Low Noise Figure	***2.7 dB***
High Output Level	***+19.0 dBm***
High Reverse Isolation	***35 dB***

High Performance Thin Film
Two-stage SMA Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	**5-600 MHz**	**10-500 MHz**	**10-500 MHz**
Small Signal Gain. (Min.)	24.5 dB	23.0 dB	22.0 dB
Gain Flatness (Max.)	±0.4 dB	±0.6 dB	±0.8 dB
Noise Figure (Max.)	2.7 dB	3.4 dB	3.7 dB
SWR (Max.) Input/Output	1.5:1	1.7:1	1.9:1
Power Output (Min.) @ 1dB comp.	+19.0 dBm	+17.5 dBm	+17.0 dBm
Reverse Isolation	35 dB	—	—
DC Current (Max.)	82 mA	85 mA	89 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	***A2C5119***
Second Order Harmonic Intercept Point	+52 dBm
Second Order Two Tone Intercept Point	+46 dBm
Third Order Two Tone Intercept Point	+34 dBm

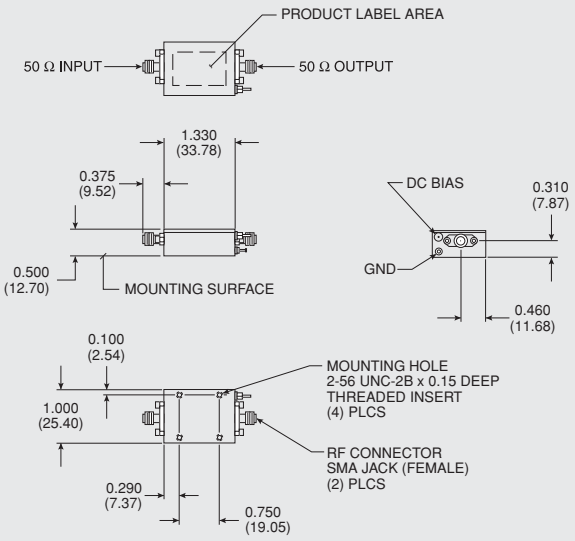
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+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	+105 °C
Thermal Resistance[1] (θjc)	+34 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+31.3 °C

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

A2C5119

T0-8 Amplifier SMA Case (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]