TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

PRELIMINARY

A4C3125

10 TO 3000 MHz SMA CASCADED AMPLIFIER

Typical Values	***A4C3125***
High Gain	***33.0 dB***
High Output Level	***+25.5 dBm***
High Third Order I.P.	***+39 dBm***
High Reverse Isolation	***52 dB***

High Performance Thin Film
Four-stage SMA Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	**5-3000 MHz**	**10-3000 MHz**	**10-3000 MHz**
Small Signal Gain (Min.)	33.0 dB	31.0 dB	29.0 dB
Gain Flatness (Max.) 10-3000 MHz	±1.0 dB	±2.0 dB	±2.5 dB
Noise Figure (Max.) 200-1000 MHz	3.8 dB	5.5 dB	6.0 dB
1000-3000 MHz	3.8 dB	4.0 dB	4.5 dB
SWR (Max.) Input/Output	1.7:1	2.2:1	2.3:1
Power Output (Min.) @ 1dB comp.	+25.5 dBm	+24.5 dBm	24.0 dBm
Reverse Isolation	52 dB	—	—
DC Current (Max.)	301 mA	325 mA	335 mA

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

INTERMODULATION PERFORMANCE

Typical @ 25 °C	***A4C3125***
Second Order Harmonic Intercept Point	+58 dBm
Second Order Two Tone Intercept Point	+52 dBm
Third Order Two Tone Intercept Point	+39 dBm

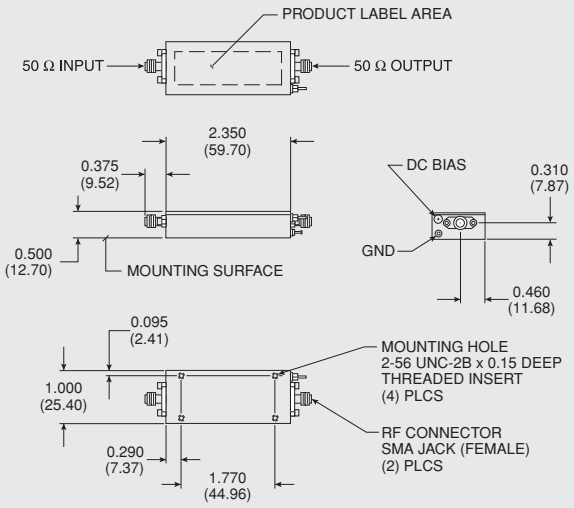
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+105 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	-2.0 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 Resistance[1] (θjc)	+23 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+56.8 °C

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

A4C3125

TO-8 Amplifier SMA Case
(three- and four-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]