TELEDYNE
MICROWAVE SOLUTIONS
Everywhereyoulook™

Rev. 2/16

A4P5130

20 TO 500 MHz SMA CASCADED AMPLIFIER

Typical Values	***A4P5130***
High Gain	***39.0 dB***
Low Noise Figure	***2.3 dB***
High Output Level	***1 Watt***
High Third Order I.P.	***+42 dBm***
High Reverse Isolation	***55 dB***

High Performance Thin Film
Power Pack SMA Package

SPECIFICATIONS*

Parameter	Typical	Guaranteed 0 to 50 °C	Guaranteed -55 to +85 °C
Frequency (Min.)	**10-600 MHz**	**20-500 MHz**	**20-500 MHz**
Small Signal Gain (Min.)	39.0 dB	37.0 dB	35.0 dB
Gain Flatness (Max.)	±0.8 dB	±1.0 dB	±1.2 dB
Noise Figure (Max.)	2.3 dB	3.2 dB	3.7 dB
SWR (Max.) Input/Output	1.7:1	2.0/2.5:1	2.0/2.7:1
Power Output (Min.) @ 1dB comp. 30-500 MHz	+30.0 dBm†	+29.0 dBm†	+28.0 dBm†
Reverse Isolation	55 dB	—	—
DC Current (Max.)	522 mA	540 mA	577 mA

* Measured in a 50-ohm system at +15 Vdc unless otherwise specified.
† 1.0 dB lower below 30 mHz.

INTERMODULATION PERFORMANCE

Typical @ 25 °C	***A4P5130***
Second Order Harmonic Intercept Point	+64 dBm
Second Order Two Tone Intercept Point	+58 dBm
Third Order Two Tone Intercept Point	+42 dBm

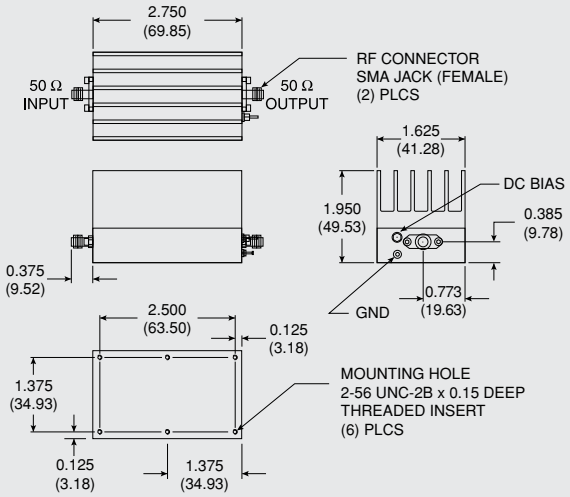
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+125 °C
Maximum DC Voltage	+19 Volts
Maximum Continuous RF Input Power	+13 dBm
Maximum Short Term Input Power (1 Minute Max.)	100 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+105 °C
Thermal Resistance[1] (θjc)	+21 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+40.5 °C

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

A4P5130

Power Pack SMA Case
(three- and four-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]