

A2P2020

50 TO 2000 MHz SMA CASCADED AMPLIFIER

Typical Values

High Gain	A2P2020 27.5 dB
Low Noise Figure	5.1 dB
High Output Level	+29.5 dBm
High Third Order I.P.	+41 dBm
High Reverse Isolation	52 dB
High Performance Thin Film	
Power Pack SMA Package	

SPECIFICATIONS*

Parameter	Typical	Guaranteed	
		0 to 50 °C	-55 to +85 °C
Frequency (Min.)	30-2100 MHz	50-2000 MHz	50-2000 MHz
Small Signal Gain (Min.)	27.5 dB	25.5 dB	24.5 dB
Gain Flatness (Max.)	±0.5 dB	±0.7 dB	±0.8 dB
Noise Figure (Max.)	5.1 dB	7.0 dB	7.5 dB
SWR (Max.) Input/Output	1.7:1	1.9:1	2.0:1
Power Output (Min.) @ 1dB comp.	+29.5 dBm	+29.0 dBm	+28.5† dBm
Reverse Isolation	52 dB	—	—
DC Current (Max.)	620 mA	635 mA	650 mA

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

† Indicates minimum temperature at -55/+71 °C.

INTERMODULATION PERFORMANCE

Typical @ 25 °C

Second Order Harmonic Intercept Point	A2P2020 +52 dBm
Second Order Two Tone Intercept Point	+55 dBm
Third Order Two Tone Intercept Point	+41 dBm

ABSOLUTE MAXIMUM RATINGS

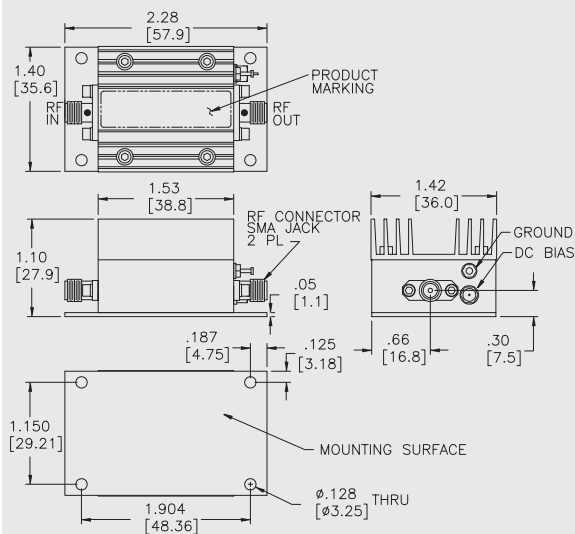
Storage Temperature	-62 to +125 °C
Maximum Case Temperature	+110 °C
Maximum DC Voltage	+17 Volts
Maximum Continuous RF Input Power	+22 dBm ¹
Maximum Short Term Input Power (1 Minute Max.)	200 Milliwatts
Maximum Peak Power (3 μsec Max.)	0.5 Watt
Burn-in Temperature	+85 °C
Thermal Resistance² (θjc)	+10 °C/Watt
Junction Temperature Rise Above Case (Tjc)	+57.8 °C

¹ If no load on output; decrease input power (no damage) by 10 dBm.

² Thermal resistance is based on total power dissipation.

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Power Pack SMA Case (two-stage)



DIMENSIONS ARE IN INCHES [MILLIMETERS]