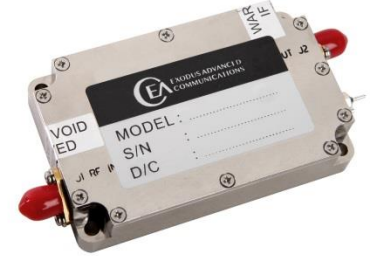




MPA1020-1 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB linear GaN design
- Instantaneous wide bandwidth
- Suitable for all modulations standards
- Built-in protection circuits
- High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 4.0 GHz	
Power Output Psat	1.5 Watt Min	CW
Output Power @ P1dB	1.0 Watt Min	CW
Power Gain	30 dB Min	
Power Gain Flatness	2.0 dB p-p Max	
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	20dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	-20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	12 - 13 VDC Nom	
Current Consumption	0.9 Amp Max	
Max Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	$\infty : 1$	< 1 minute @ rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

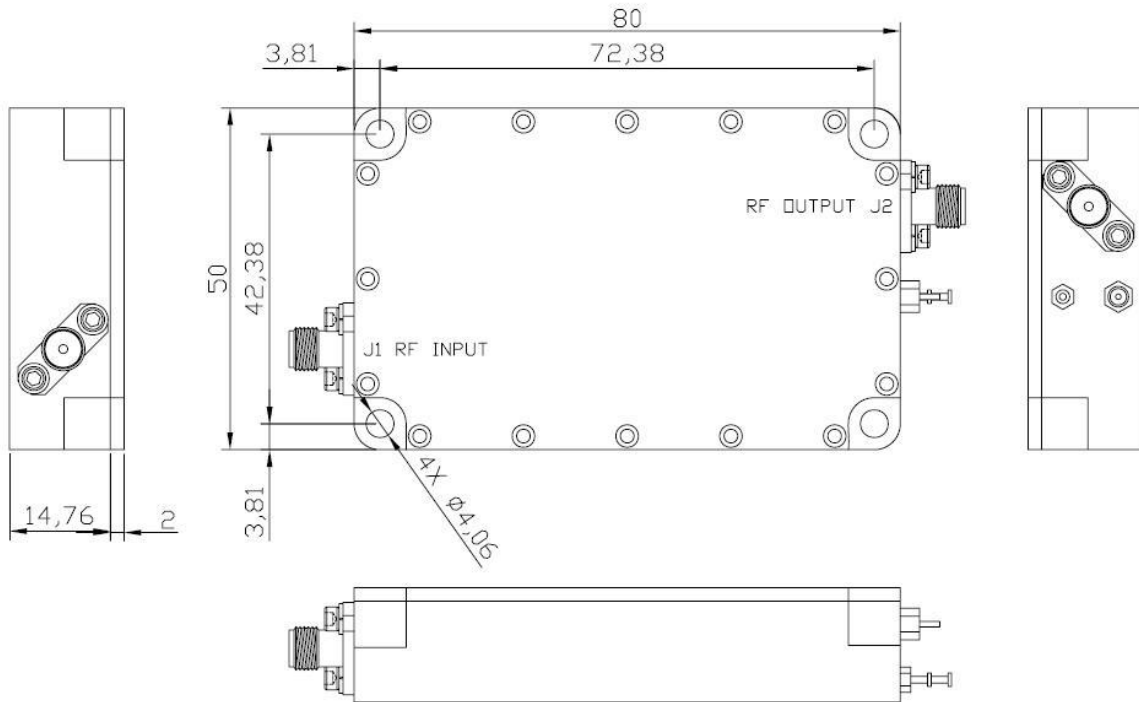
MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	80 x 50 x 17 mm	Without connectors
Weight	150 gr.	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	Feed Thru	
Cooling	External Heatsink	

OPTION ORDERING INFORMATION:

OPTION	Function	Description
101	FWD	Forward power detect
103	VVA	Variable Voltage Attenuator

OUTLINE DRAWING



Below outline shown with Option 103 - Built in VVA

