



8.0-8.5GHz 10Watt SOLID STATE HIGH POWER AMPLIFIER
MtronPTI P/N: PA3013

FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	8.0 - 8.5GHz	
Power Output @ P1dB	10 Watt Min	CW
Power Gain	20 dB Min	Requires a driver for 0dBm input power operation
Power Gain Flatness	2.0 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30dBc Typ	33dBm/Tone, $\Delta = 1$ MHz
Harmonics	>25 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc Min	
Noise Figure	8.0 dB Max	
Operating Voltage	40 \pm 0.5 VDC Nom	
Current Consumption	4.0 Amp Max	At rated Pout
Max Input Power	+10 dBm	Without damage
Load VSWR Protection	3 : 1	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

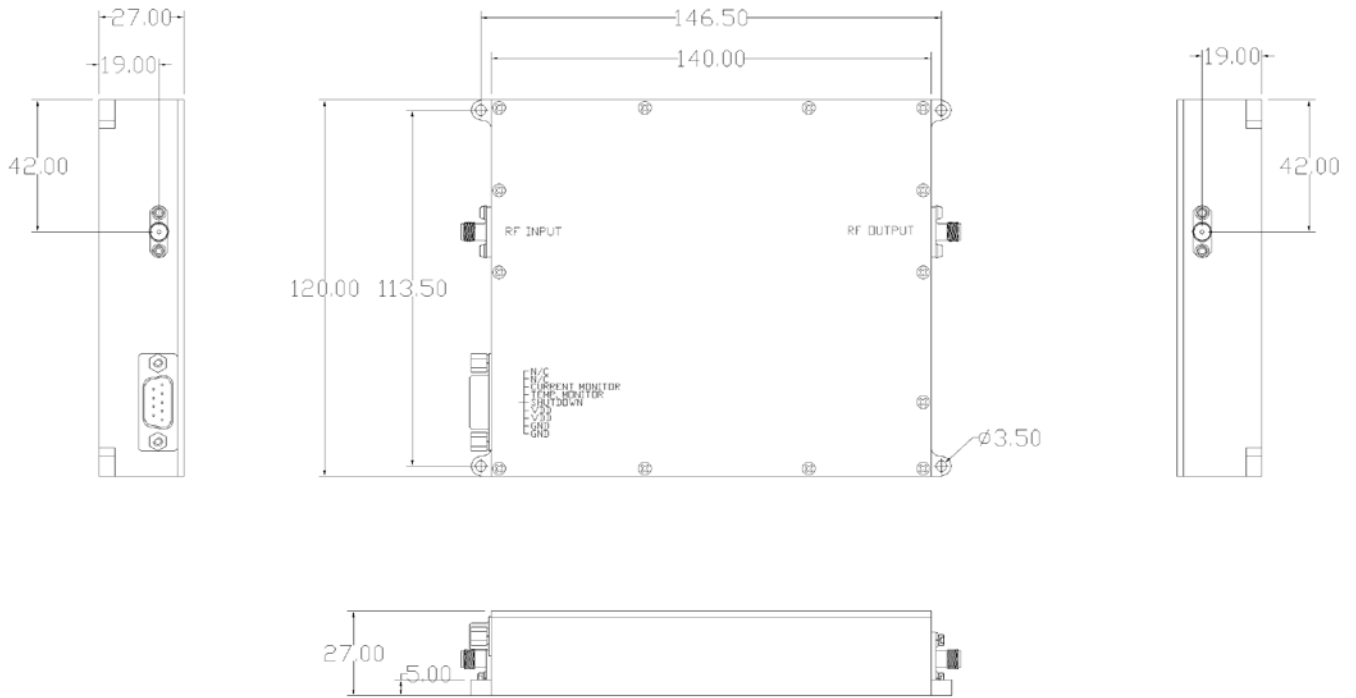
Parameter	Specification	Notes
Dimensions	140 X 120 X 27 mm	Excluding Connectors
Weight	TBD	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Reserved
2	VVA	Reserved
3	CURRENT SENSOR	$I_p @ 50mV/100mA$ Typ
4	TEMP SENSOR	$V_T @ 10mV/^{\circ}C + 500mV$ Typ
5	SHUTDOWN	TTL
6, 7	VDD	40VDC
8, 9	GND	Ground



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OUTLINE DRAWING



Data Sheet Revision Table:

Date	Rev.	Author.	Details of Revision
05-01-15	0	DPD	Initial Draft.