



2.2-2.3GHz 10Watt SOLID STATE HIGH POWER AMPLIFIER

MtronPTI P/N: PA3038

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.2 - 2.3GHz	
Power Output Psat	10 Watt Min / 15 Watt Typ	CW
Output Power @ P1dB	10 Watt Min	
Power Gain	30 dB Min	Requires a driver for 0dBm input power operation
Power Gain Flatness	2.0 dB p-p Max	Constant input power
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc	32dBm/Tone, $\Delta = 1$ MHz
Harmonics 2 nd / 3rd	>15 dBc / 20 dBc Typ	At Rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 - 30 VDC	
Current Consumption	4.0 Amp Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	$\infty : 1$	

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	157 X 69 X 27 mm	Excluding Connectors
Weight	525 gr.	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

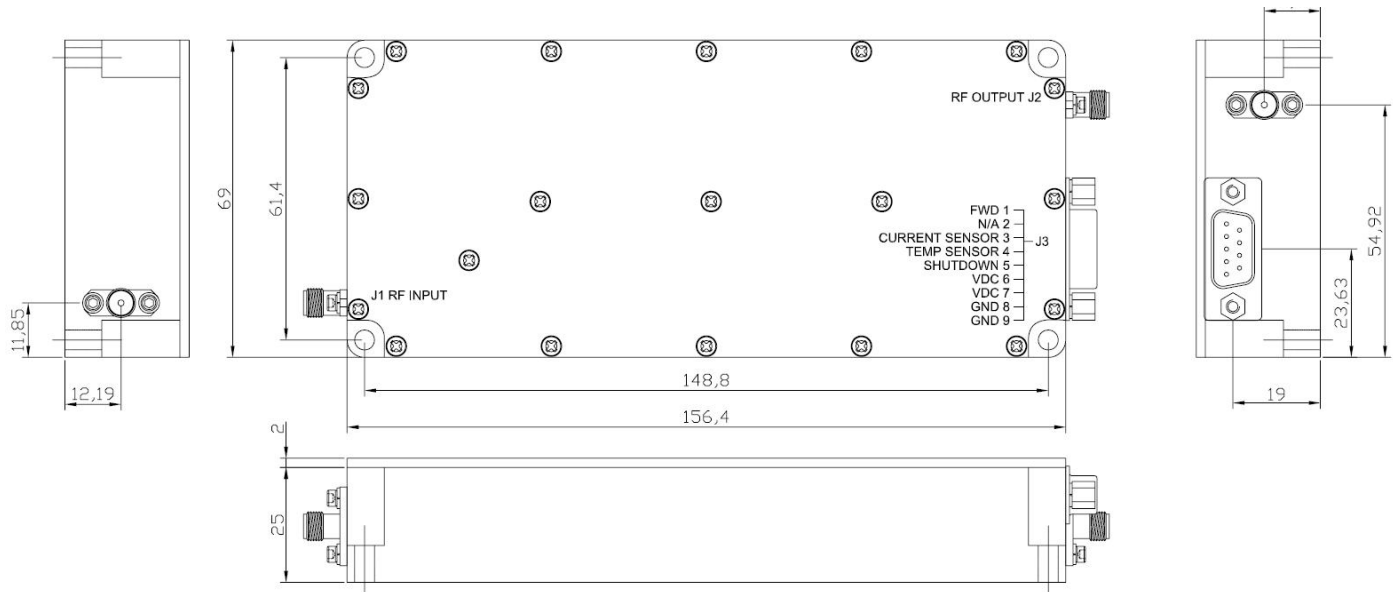
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	OPTION 101 - Forward Detect Power
2	REV	N/C
3	CURRENT SENSOR	$I_D @ 100mV/100mA$ Typ
4	TEMP SENSOR	$V_T @ 10mV/^{\circ}C + 500mV$ Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground



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 OUTLINE DRAWING OPTION 01



OPTION ORDERING INFORMATION:

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

Data Sheet Revision Table:

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