HD31108
SOLID STATE HIGH POWER AMPLIFIER

PRELIMINARY

FEATURES

Class AB GaN design
Instantaneous wide Bandwidth
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	15.0 - 18.0 GHz	
Power Output @ P1dB GCP / CW	20 Watt / 30 Watt Min	CW
Small Signal Gain	46 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	10 dB Min	
Harmonics	>20 dBc	At rated Pout
Non Harmonics Spurious	>60 dBc	
Noise Figure	8 dB Max	
Operating Voltage	42 VDC ± 0.5 V	
Current Consumption	11 Amp Max	At rated Pout
Max Input Power	+8 dBm Max	Without damage
Load VSWR Protection	3 : 1	

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	250 X 150 x 27 mm	Excluding Connectors
Weight	TBD	
RF Connectors In/Out	SMA female / WR62	Cover Flange
DC Power / Interface Connector	9-Pin Dsub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

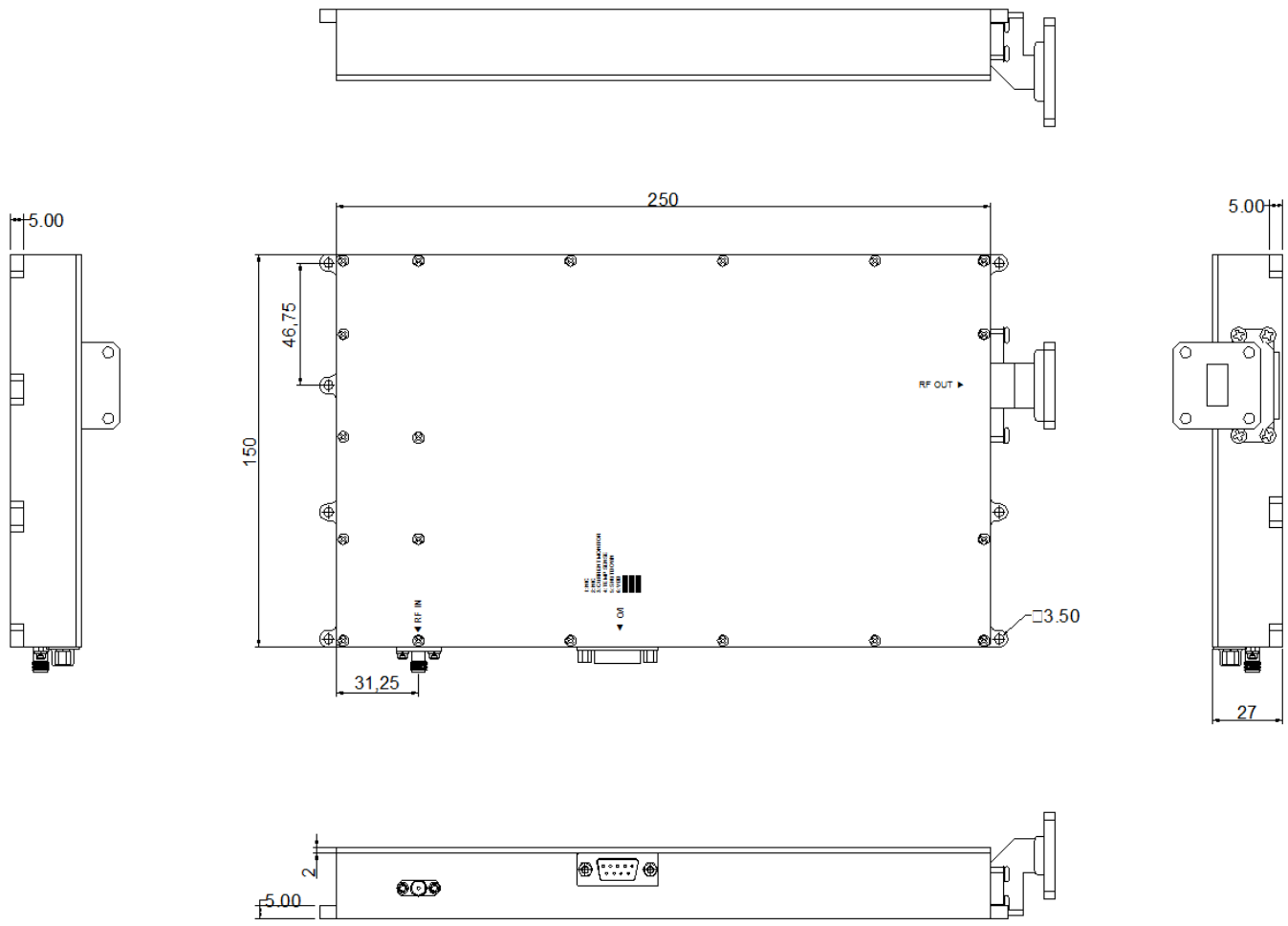
Pin	Function	Description
1		N/A
2		N/A
3	Current Sensor	I_D@20mV/100mA Typ
4	Temp Sensor	V_T@10mV/°C + 500mV Typ
5	Shutdown	TTL
6,7	VDD	42 VDC
8,9	GND	Ground

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OUTLINE DRAWING



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