HD31781
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB GaAsFET Chip & Wire technology
Instantaneous ultra-wide Bandwidth
Designed for EMI/RFI, lab, and general communication applications
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output Psat	8 Watt Min	CW
Small Signal Gain	40 dB Min	
Power Gain Flatness	4.0 dB p-p Max	
Input Return Loss	-10 dB Max	50 Ohm reference
Harmonics	<-15 dBc Typ	At rated Pout
Noise Figure	10 dB Max	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	12 VDC ±0.5 V	
Current Consumption	12 Amp Max	At rated Pout
Input Power Protection	+3 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Max	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	100 x 100 x 27mm	Excluding connectors
Weight	600 gr.	
RF Connectors In/Out	Hi Freq. SMA-female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

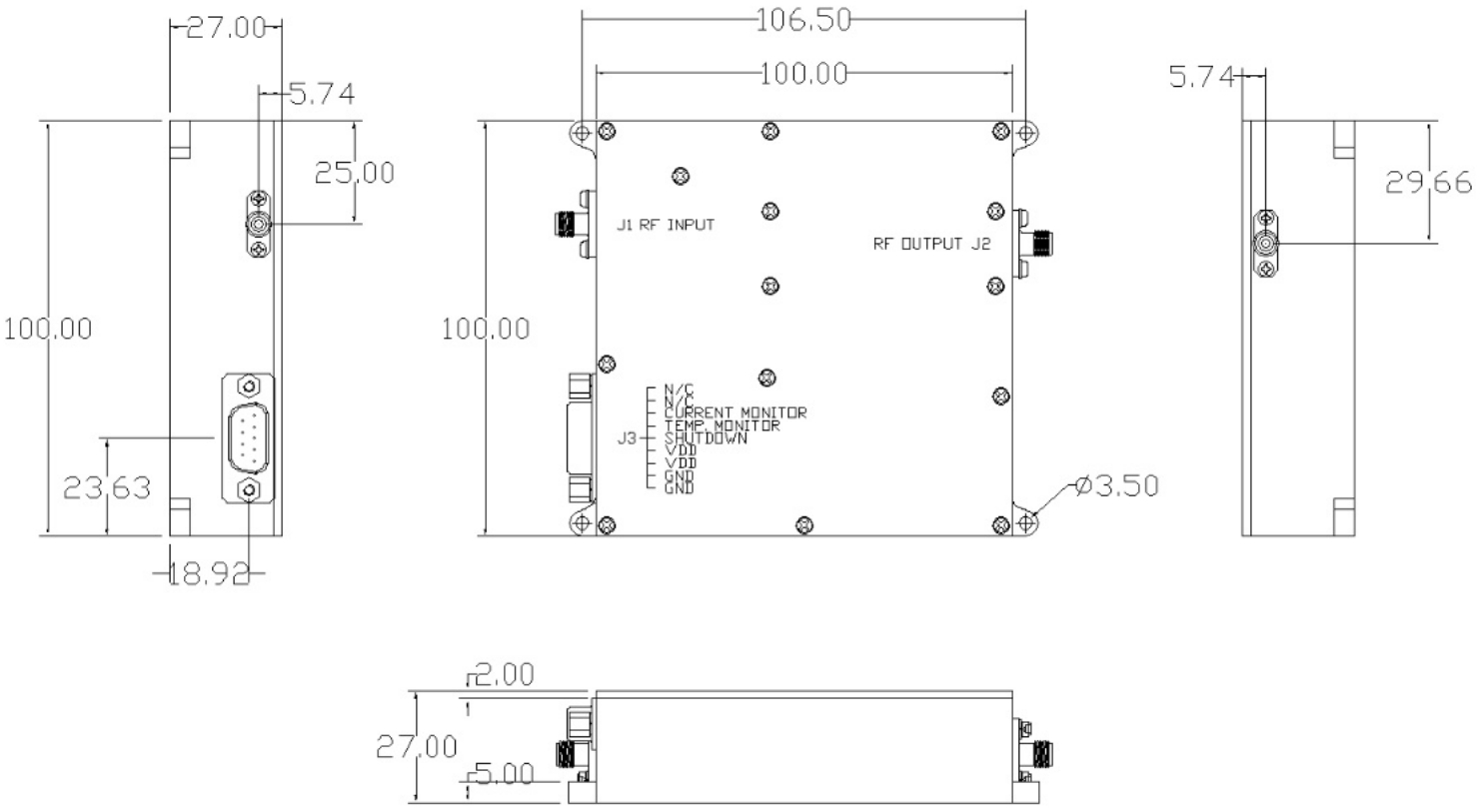
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/A	N/A
2	N/A	N/A
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "Low" or 0V / Disable = TTL "High" (<3.2V)
6, 7	VDD	12VDC
8, 9	GND	Ground

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Specifications subject to change without notice. Specifications and drawings may vary with selected options.

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OUTLINE DRAWING



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