HD31561
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMC-EMI/RFI, Lab, and general comm applications
Compact Small form factor, light weight, high power density
Class A/AB linear advanced technology design
Instantaneous ultra-wide bandwidth
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 28VDC, 25°C

Parameter	Specification	Notes
Operating Frequency Range	100 - 1000 MHz	
Power Output @ Psat	10 Watt Min	CW
Power Gain	40 dB Min	0dBm or less for rated Pout
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max / -7dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	30dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	10 dB Max	
Operating Voltage	28 VDC Nom	
Current Consumption	2.0 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	∞ : 1	<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	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport[1]	

1 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	125 x 63 x 27 mm	Without Connectors
Weight	300 gr.	Typical Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

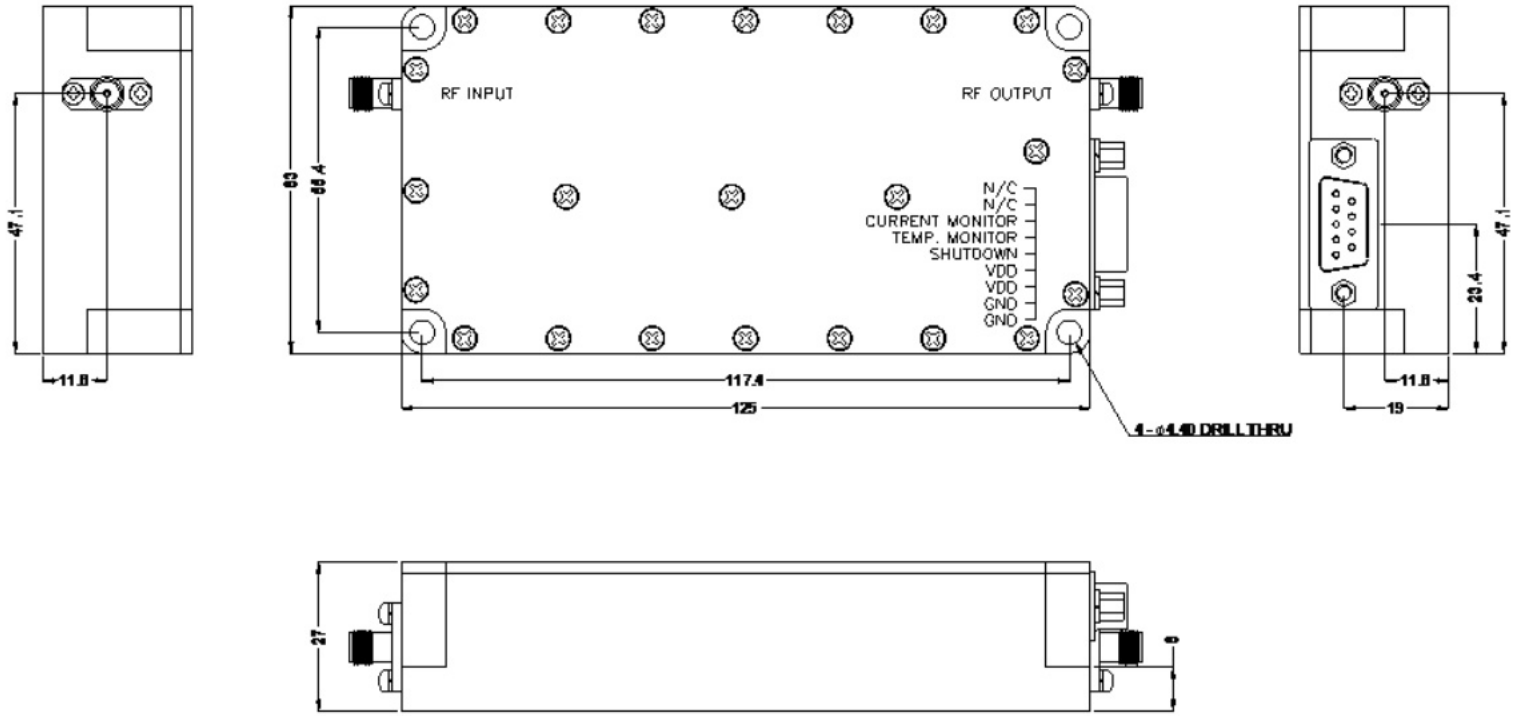
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Option-101 (With larger housing dimensions)
2	VVA	Option-103 (With larger housing dimensions)
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL High or Open; Disable = TTL Low or Short
6, 7	VDD	28VDC
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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