HD35104
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMC-EMI/RFI, Lab, and general communication applications
Small form factor, high power density
Class A/AB linear advanced technology design
Instantaneous wide bandwidth
Suitable for CW and single channel linear applications
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	3.0 - 10.0 GHz	
Power Output @ Psat	4 Watt Min	CW
Power Gain	35 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Noise Figure	5 dB Max	
Input Return Loss	10 dB Min	
2-Tone Intermodulation (IMD)	-30 dBc Typ	25 dBm/Tone, Δ = 1MHz
Harmonics	<-15 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 VDC Nom	
Current Consumption	2.5 Amp Max / 2.2 Amp Typ	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without Damage
Load VSWR Protection	∞ : 1	<1 Min 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 m	
Shock & Vibration	Normal transport[1]	

1 MIL Spec available for quotation.

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	90 x 75 x 25 mm	Excluding connectors
Weight	<1 lb.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

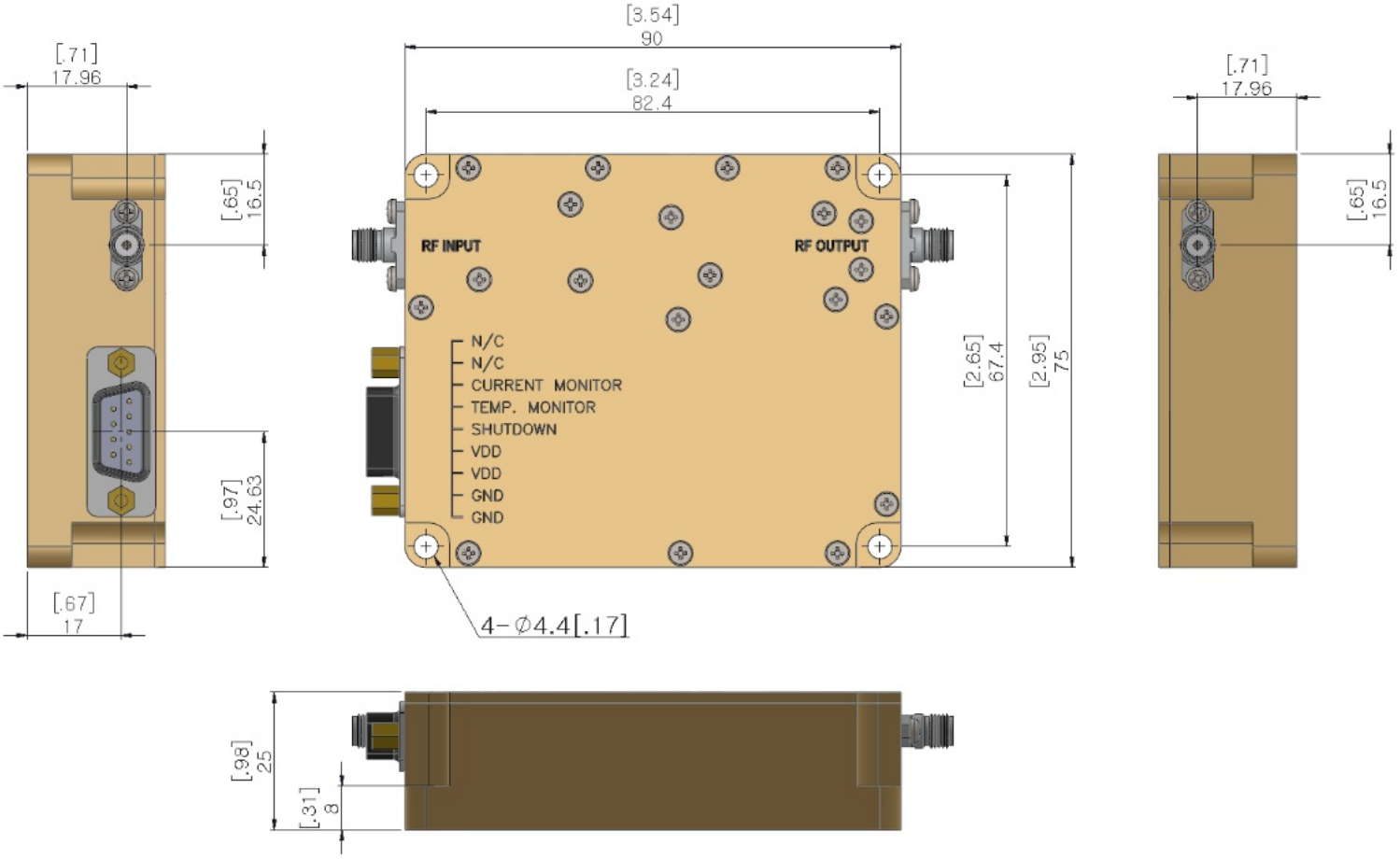
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	Not Used	N/A
2	Not Used	N/A
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "High" or OPEN / Disable = TTL "Low" or GND
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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OUTLINE DRAWING
OPTIONAL HEATSINK (Option HSF)



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