HD31755
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Instantaneous wide bandwidth
Booster configuration
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	500 - 2500 MHz	
Power Output	50 Watt Min	CW
Power Gain	18 - 20 dB Nom	
Power Gain Flatness	3.0 dB p-p Max	
Input / Output VSWR	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	37dBm/Tone, Δ = 1MHz
Harmonics	-25 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 30 VDC	
Current Consumption	7 Amp Max	At rated Pout
Input Power Protection	+40 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 +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	188 x 91.5 x 27 mm	Excluding connectors
Weight	850 gr.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air cooling required

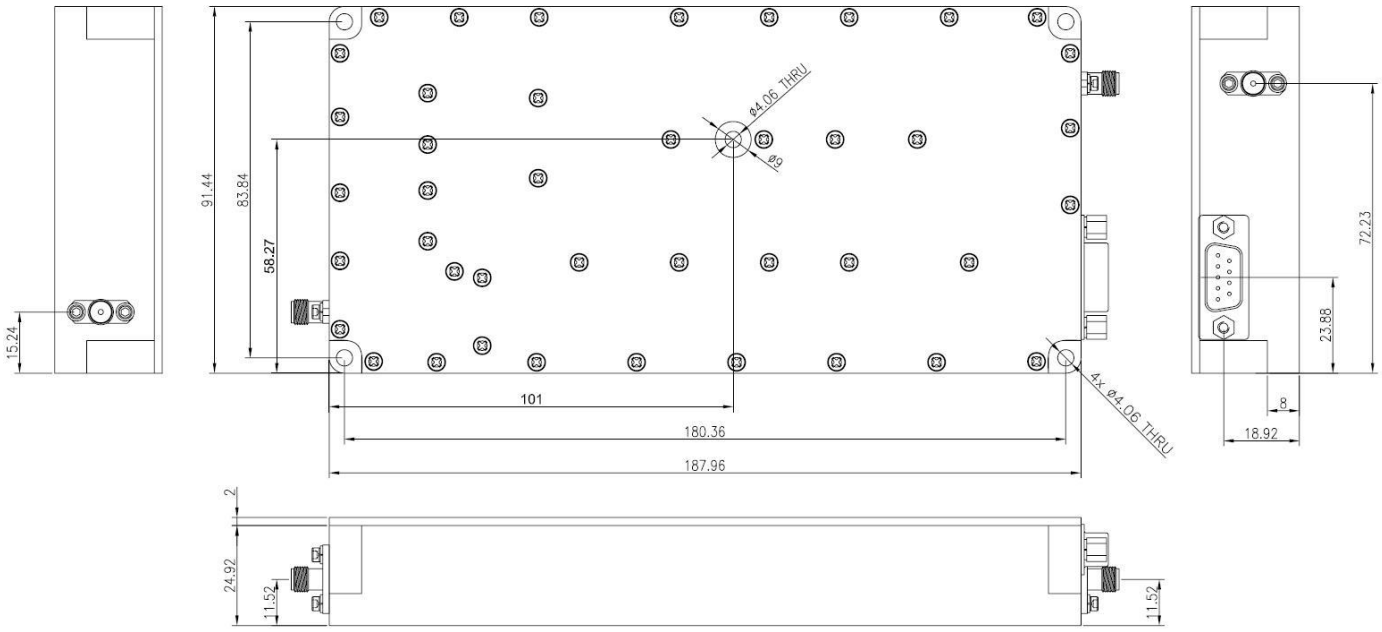
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	I_D @ 50mV/100mA Typ
4	TEMP SENSOR	V_T @ 10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL “Hi” (>3.2V) or Open / Disable = TTL “Lo” or short
6, 7	VDD	28VDC
8, 9	GND	Ground

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OUTLINE DRAWING



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