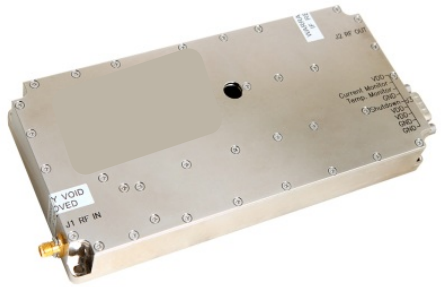
HD Communications Corp.

HD31753
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1000 - 2500 MHz	
Power Output @ Psat	50 Watt Min	CW
Power Gain	47 dB Min	
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	38dBm/Tone, Δ = 1MHz
Harmonics	-25 dBc Typ	At rated Pout
Non Harmonics Spurious	-60 dBc Max	
Operating Voltage	28 VDC Nom	
Current Consumption	7 Amp Max	At rated P1dB
Max Input Power protection	+8 dBm	>10 Sec
Load VSWR Protection	∞ : 1	>1 Min

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	188 x 91.5 x 27 mm	Typical Dimensions
Weight	850 gr.	Max 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

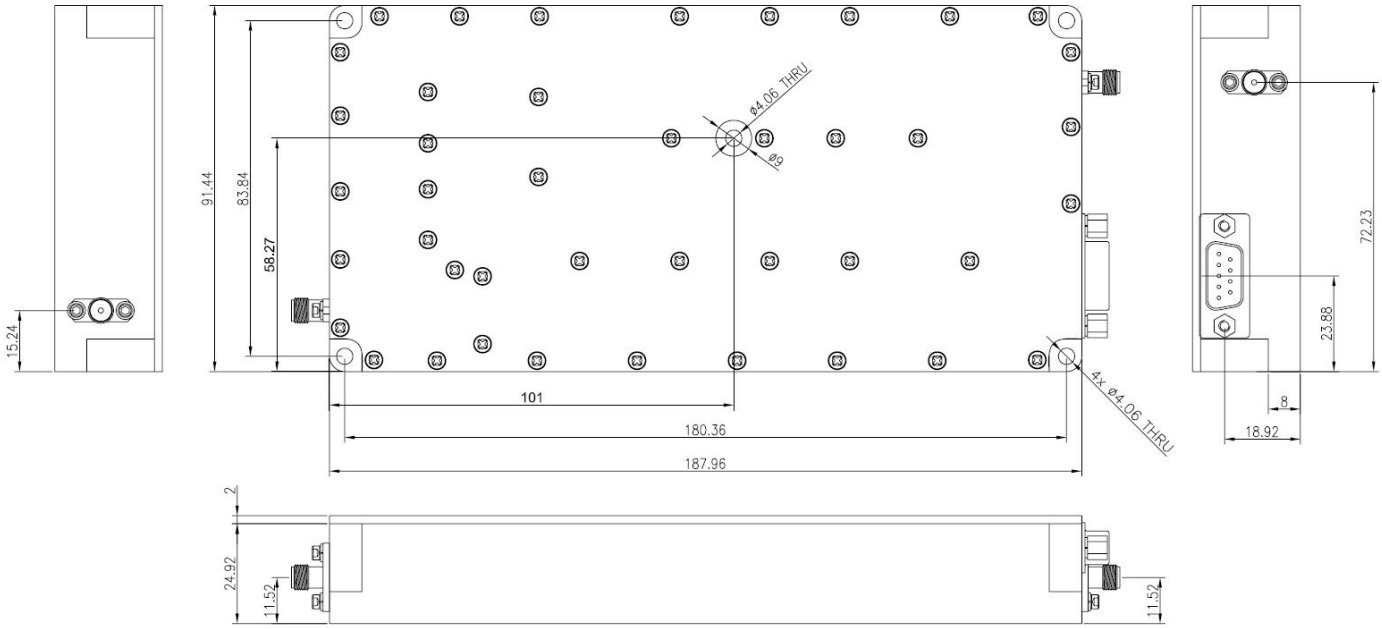
Pin	Function	Description
1	FWD	N/C
2	VVA	N/C
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

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OUTLINE DRAWING



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