HD31826
SOLID STATE HIGH POWER AMPLIFIER

HD Communications Corp.

FEATURES

Class AB solid-state linear design
Instantaneous 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 Output @ P1dB GCP	8 Watt Min	CW
Power Gain	40 dB Min	
Gain Flatness	3.0 dB p-p Max	
Input / Output Return Loss	10 dB Min / 7 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	30dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	At rated Pout
Non-Harmonics Distortions	-60 dBc Max	
Noise Figure	7 dB Min	
Operating Voltage	28 VDC Nom	
Current Consumption	2.0 Amp Max	At rated Pout
Max Input Power Protection	+8 dBm	Without damage
Load VSWR Protection	∞ : 1	

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	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

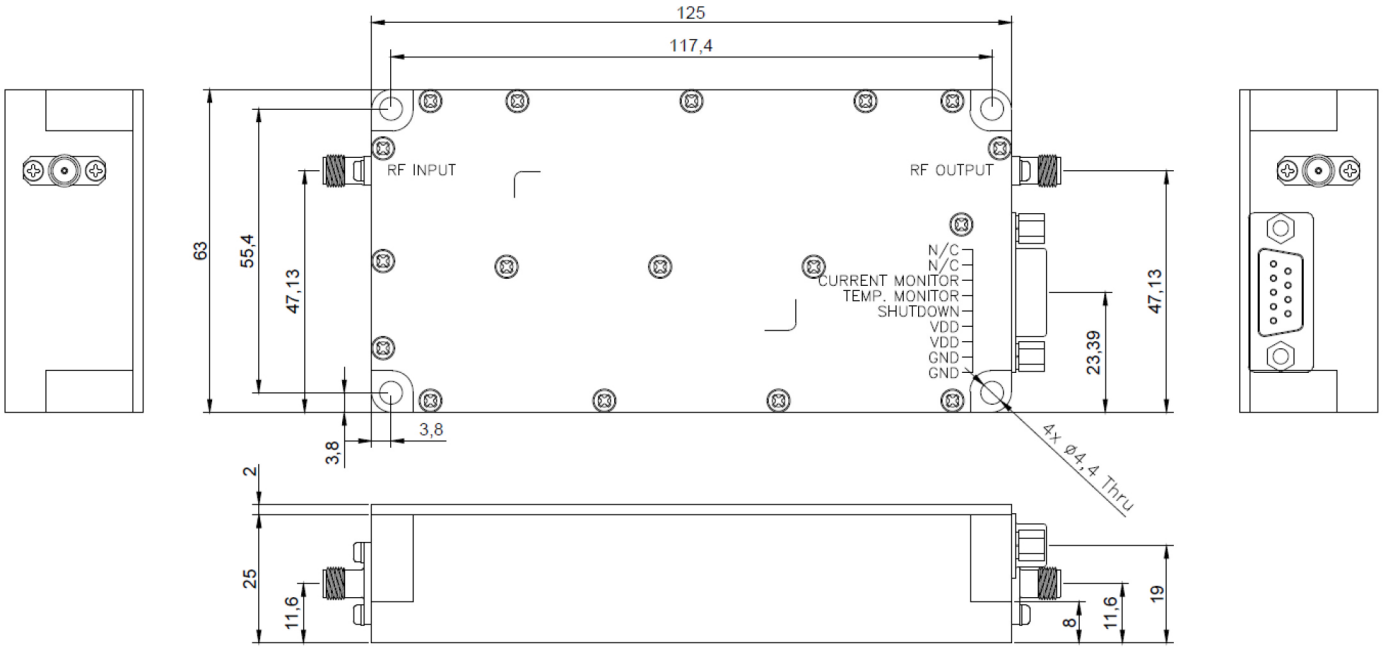
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	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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