HD31148
SOLID STATE HIGH POWER AMPLIFIER

Communications Corp.

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 12.0 GHz	
Power Output	20 Watt Min	CW
Power Gain	43 dB Min	
Power Gain Flatness	4.0 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	33 dBm/Tone, Δ = 1 MHz
Harmonics @ Rated Pout	>25 dBc Typ	2nd: 6.0 - 6.5 GHz: 13dBc Typ
Non Harmonics Spurious	>60 dBc Min	
Noise Figure	8.0 dB Max	
Operating Voltage	32 ±0.5 VDC Nom	
Current Consumption	7.2 Amp Max	At rated Pout
Max Input Power	+10 dBm	Without damage
Load VSWR Protection	3 : 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	150 X 110 X 27 mm	Excluding Connectors
Weight	TBD	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

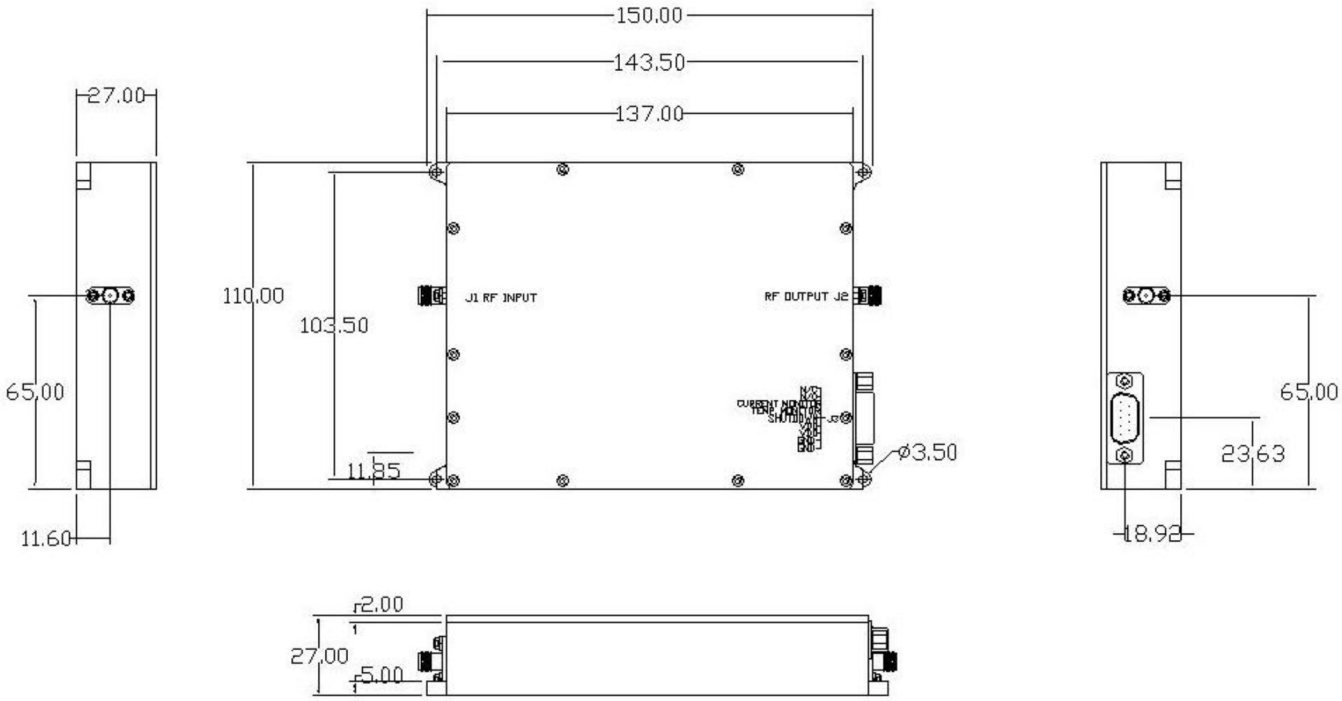
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Reserved
2	VVA	Reserved
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	32VDC
8, 9	GND	Ground

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OUTLINE DRAWING



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