HD31081
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 8.0 GHz	
Power Output Psat	30 Watt Min	CW
Small Signal Gain	45 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	>20 dBc Typ	At rated output
Noise Figure	8.0 dB Max	
Non Harmonics Spurious	60 dBc Min	
Operating Voltage	42 VDC ± 0.5 V	
Current Consumption	6 Amp Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	5 : 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	147 X 69 X 27 mm	Excluding Connectors
Weight	550 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

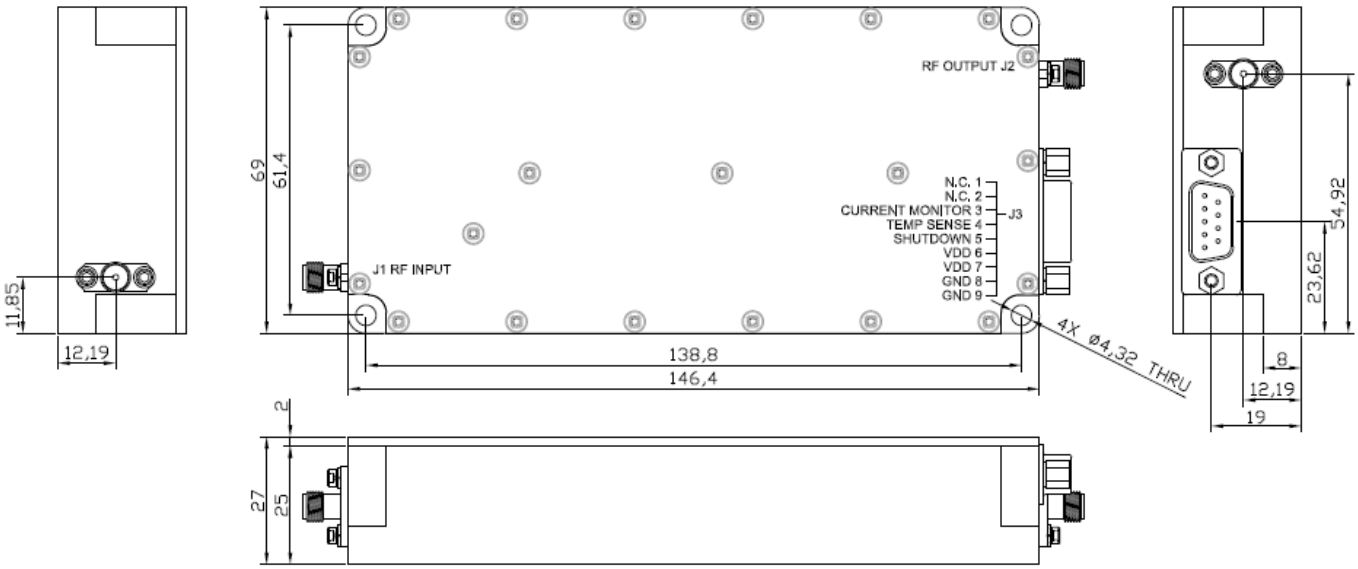
Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	42VDC
8, 9	GND	Ground

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Communications Corp.

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OUTLINE DRAWING



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