HD31762
SOLID STATE HIGH POWER AMPLIFIER

Communications Corp.

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	0.7 - 4.2 GHz	
Power Output Psat	10 Watt Min	CW
Output Power @ P1dB	5 Watt Min	
Power Gain	40 dB Min	
Gain Flatness	3.0 dB p-p Max	
Input Return Loss	10dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	30dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	
Distortions	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 30 VDC	
Current Consumption	3.0 Amp Max / <2.5 Amp Typ	At rated Pout
Input Power Protection	+8 dBm Max	<10Sec 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-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	125 x 63 x 27 mm	Without connectors
Weight	400 gr.	
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

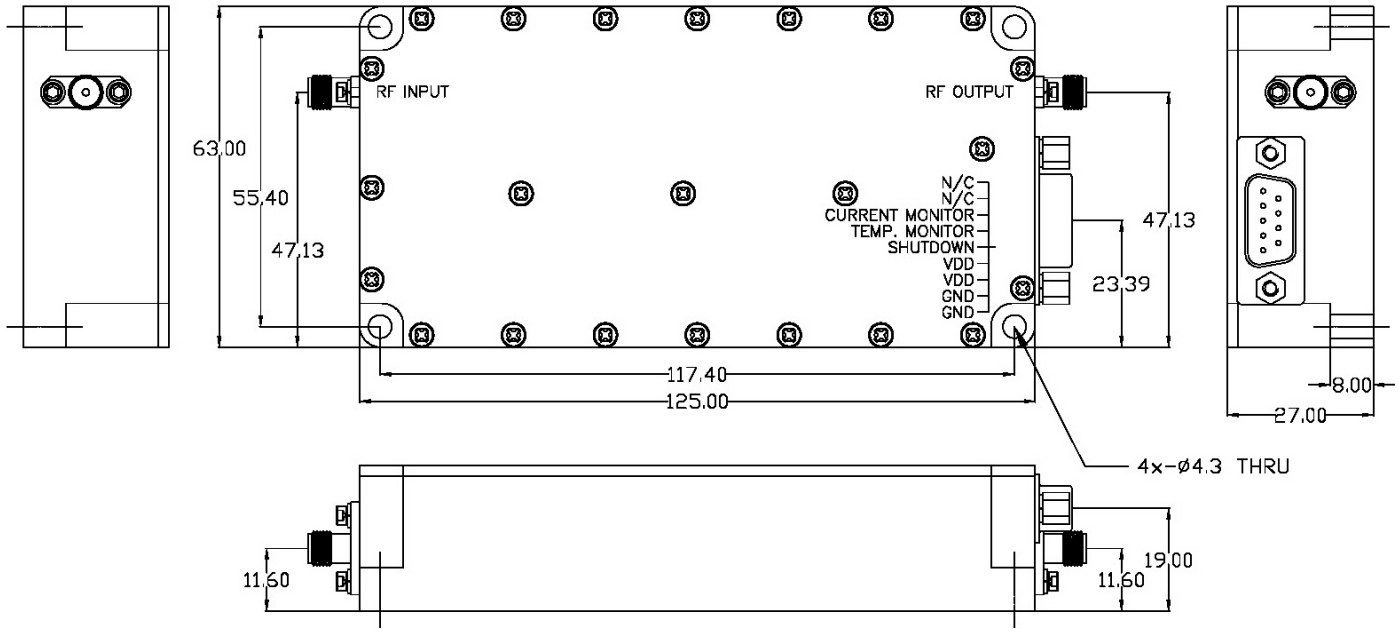
Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	I_D@100mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

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OUTLINE DRAWING



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