HD Communications Corp.

HD31761
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	0.8 - 3.0 GHz	
Power Output Psat	10 Watt Min	CW
Output Power @ P1dB	6 Watt Min	
Power Gain	40 dB Min	
Gain Flatness	3.0 dB p-p Max	
Input Return Loss	10 dB 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
Max Input Power Protection	+8 dBm	<10 Sec 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.	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

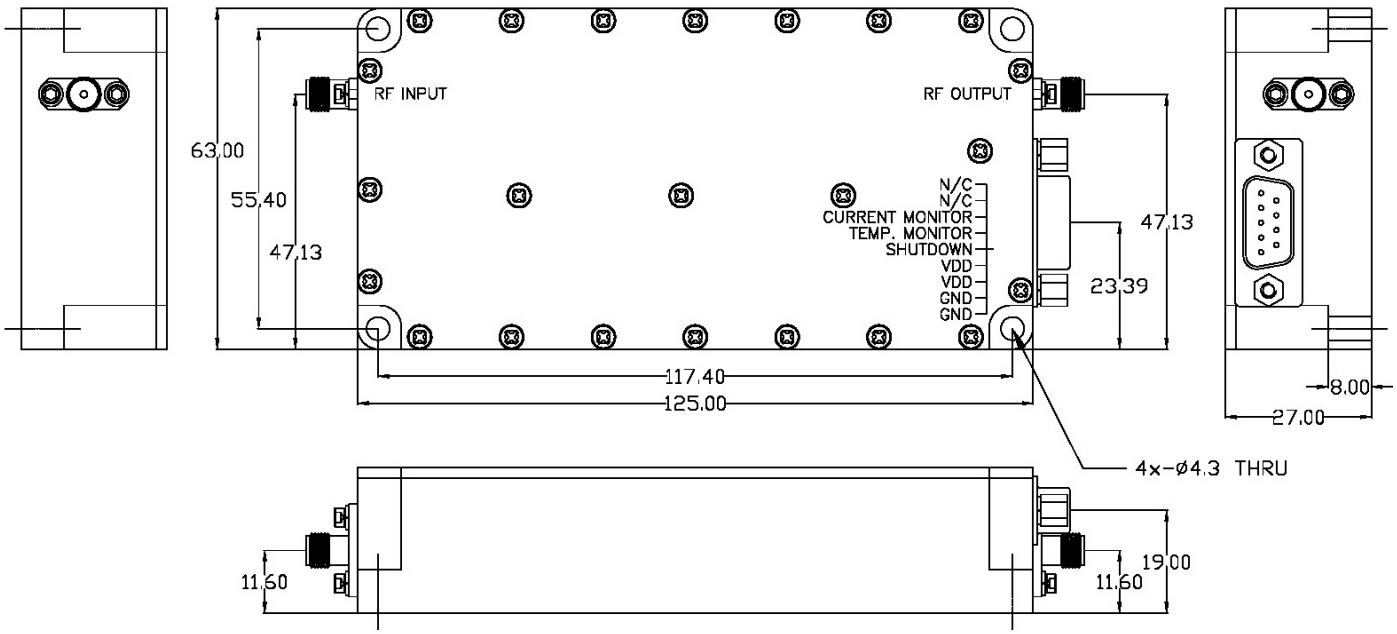
Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	I_D@100mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

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OUTLINE DRAWING



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