HD Communications Corp.

HD31987
SOLID STATE HIGH POWER AMPLIFIER



FEATURES

High Power Linear Hybrid GaAsFET and GaN design
Instantaneous ultra-wide bandwidth
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output at Past	30 Watt Typ	CW
Power Output at P1dB	15 Watt Min	
Power Gain	45 dB Min	
Power Gain Flatness	4.0 dB p-p Max	
Input Return Loss	10 dB Min	
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	8.0 dB Max	
Operating Voltage	32 VDC Nom	
Current Consumption	9 Amp Max	At rated Pout
Input Power Protection	+3 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Max	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	170 x 180 x 27 mm	Excluding connectors
Weight	1.5 kg	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

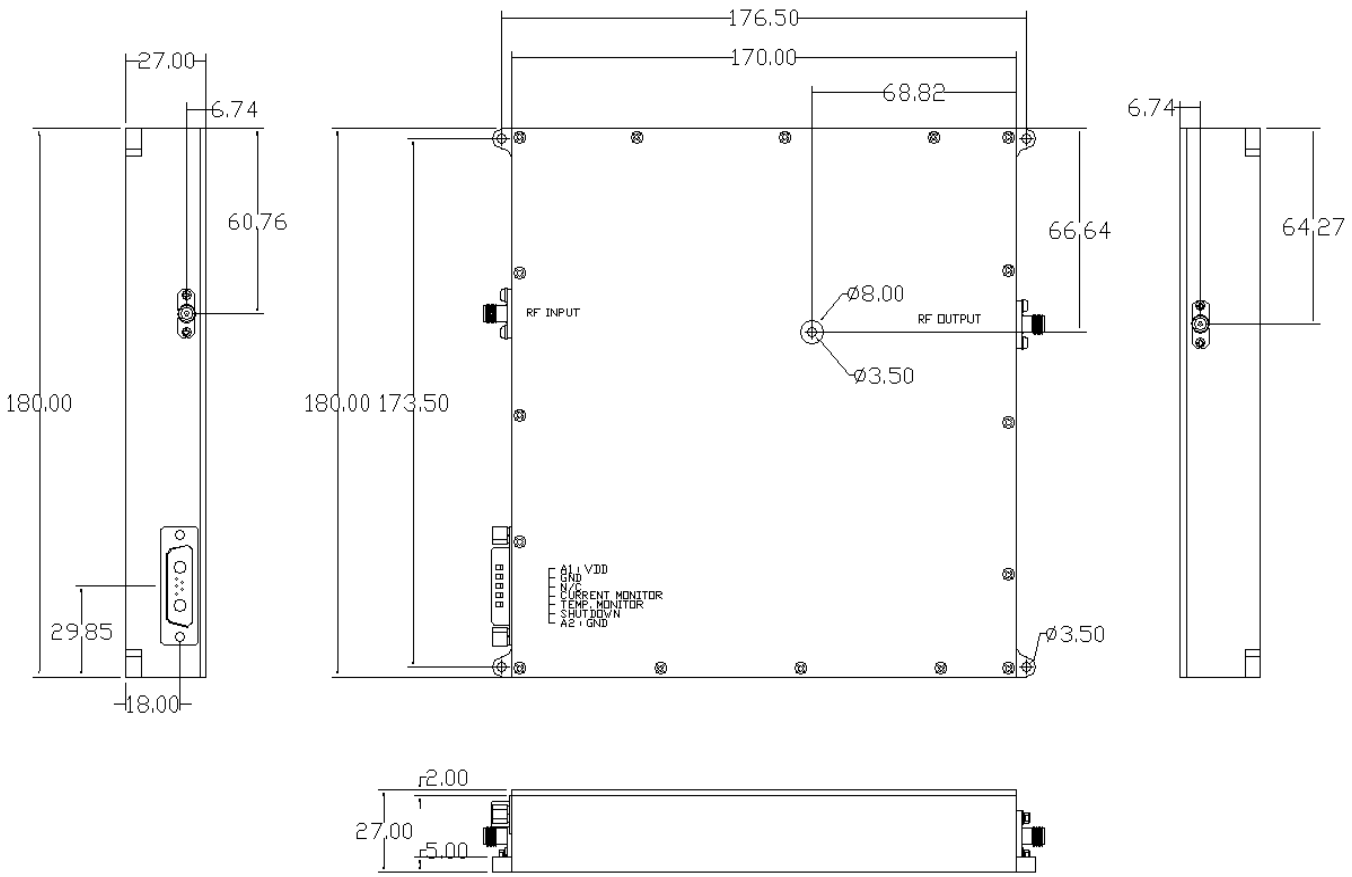
Pin	Function	Description
1		N/A
2		N/A
3	Current Sensor	I_D@20mV/100mA Typ
4	Temp Sensor	V_T@10mV/°C + 500mV Typ
5	Shutdown	Enable = TTL “Hi” or open / Disable = TTL “Lo” or short
A1	VDD	32VDC
A2	GND	Ground

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OUTLINE DRAWING



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