HD31871
SOLID STATE HIGH POWER AMPLIFIER

HD Communications Corp.

FEATURES

Class AB linear GaN design
Instantaneous bandwidth
Suitable for X-Band linear applications
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	8.0 - 9.0 GHz	
Power Output @ P1dB GCP	100 Watt Min	CW
Power Gain	50 dB Min	
Power Gain Flatness	2.0 dB p-p Max	
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	-30 dBc Max	At rated Pout
Non-Harmonics Spurious	-60 dBc Max	
Operating Voltage	40 VDC Nom	
Current Consumption	24 Amp Avg Max	At rated Pout
Max Input Power	+5 dBm Max	Without damage
Load VSWR Protection	5 : 1	Require external coaxial Isolator

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	310 x 320 x 43 mm	Including WG
Weight	10 Kg	
RF Connectors In/Out	SMA / Type-N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

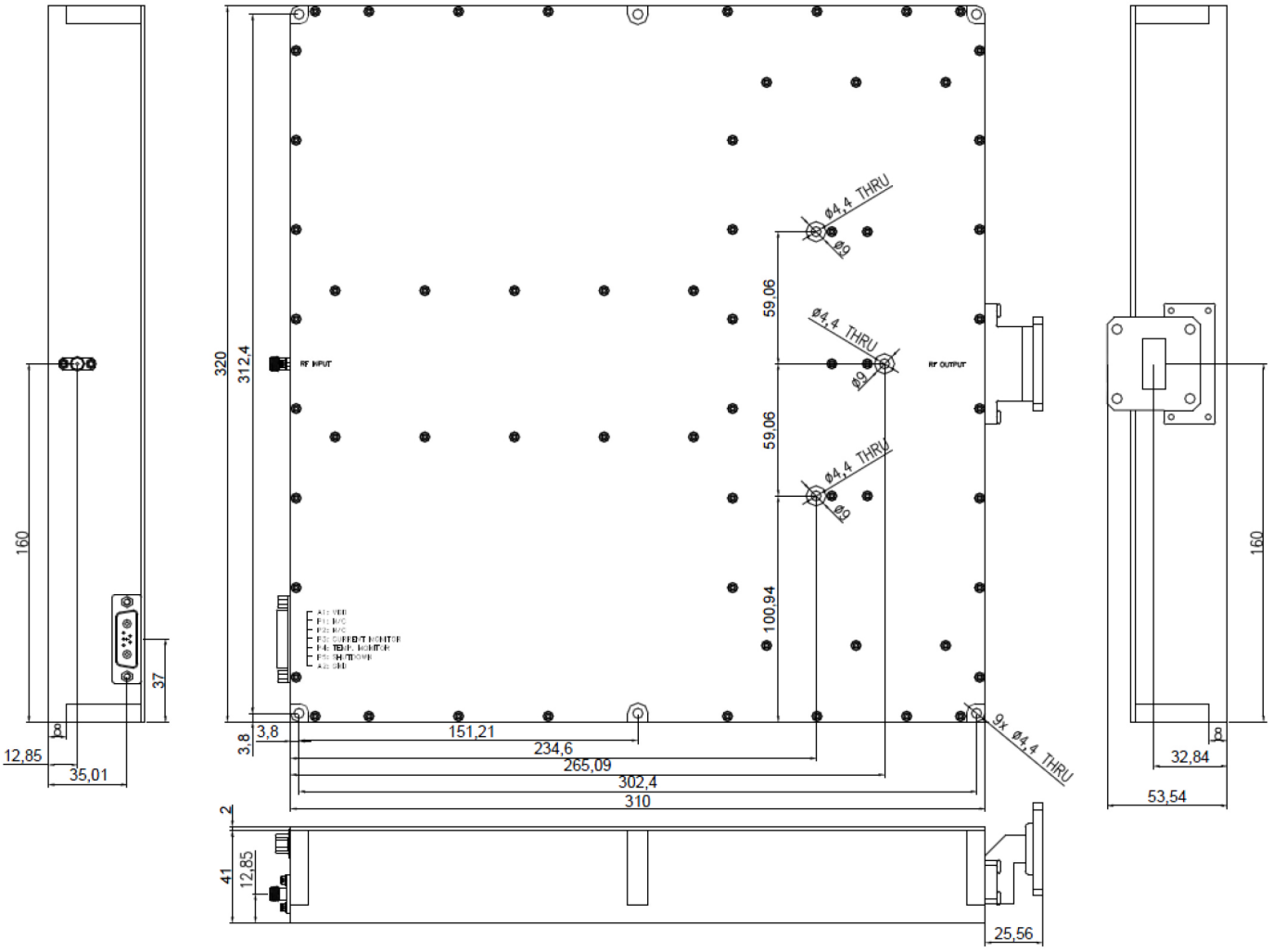
Pin	Function	Description
1	N/C	
2	N/C	
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1	VDD	40VDC
A2	GND	Ground

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfamplifiers.com www.rfcomp.com sales@hdcom.com

HD31871
SOLID STATE HIGH POWER AMPLIFIER

Communications Corp.

OUTLINE DRAWING



332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfamplifiers.com www.rfcomp.com sales@hdcom.com