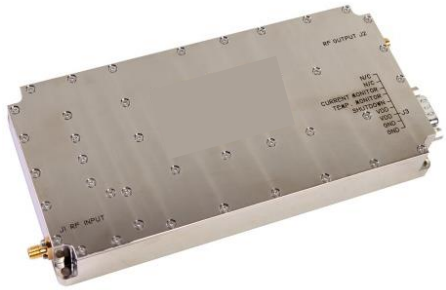
HD30986
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Instantaneous bandwidth
Suitable C-Band high peak power pulse applications
Small form factor & light weight
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	5.4 - 5.9 GHz				
Power Output Peak Pulse	300 Watt Min				
Power Gain	55 dB Min				
Power Gain Flatness	2.0 dB p-p Max			Constant input power	
Input / Output Return Loss	-10 dB Max			Relative to 50 Ohm	
Input Pulse Characteristics	**Width**	**Duty**	**Droop**	**Rise/Fall**	
	150 µS	10 %	<1 dB	<100 nS	
Harmonics	<-20 dBc Typ			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	50 VDC Nom				
Current Consumption	24 Amp Peak / 6 Amp Max			At rated Pout	
Input Power Protection	+8 dBm Max			Without damage	
Load VSWR Protection	∞ : 1			Output isolator	
Turn On / Off Speed	1 µSec Max			Fast switching option	

ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	250 x 130 x 42 mm	Excluding connectors
Weight	-	
RF Connectors In/Out	SMA / Type-N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	7W2
Cooling	External Heatsink	Forced air required

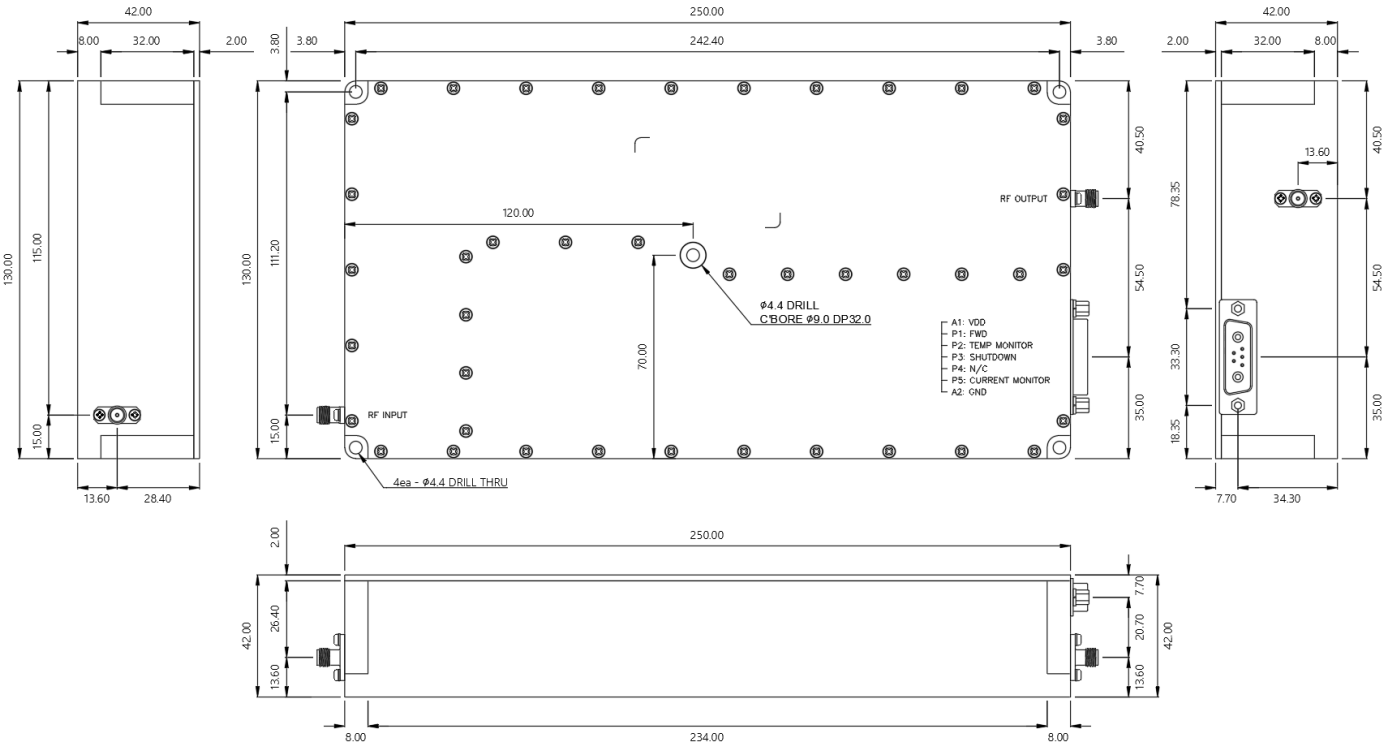
HD Communications Corp. 338 Jericho Tpke. Ste 387
Syosset, NY 11791
Tel: (631) 588-3877 Email: sales@hdcom.com

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D-SUB CONNECTOR PIN ASSIGNMENT

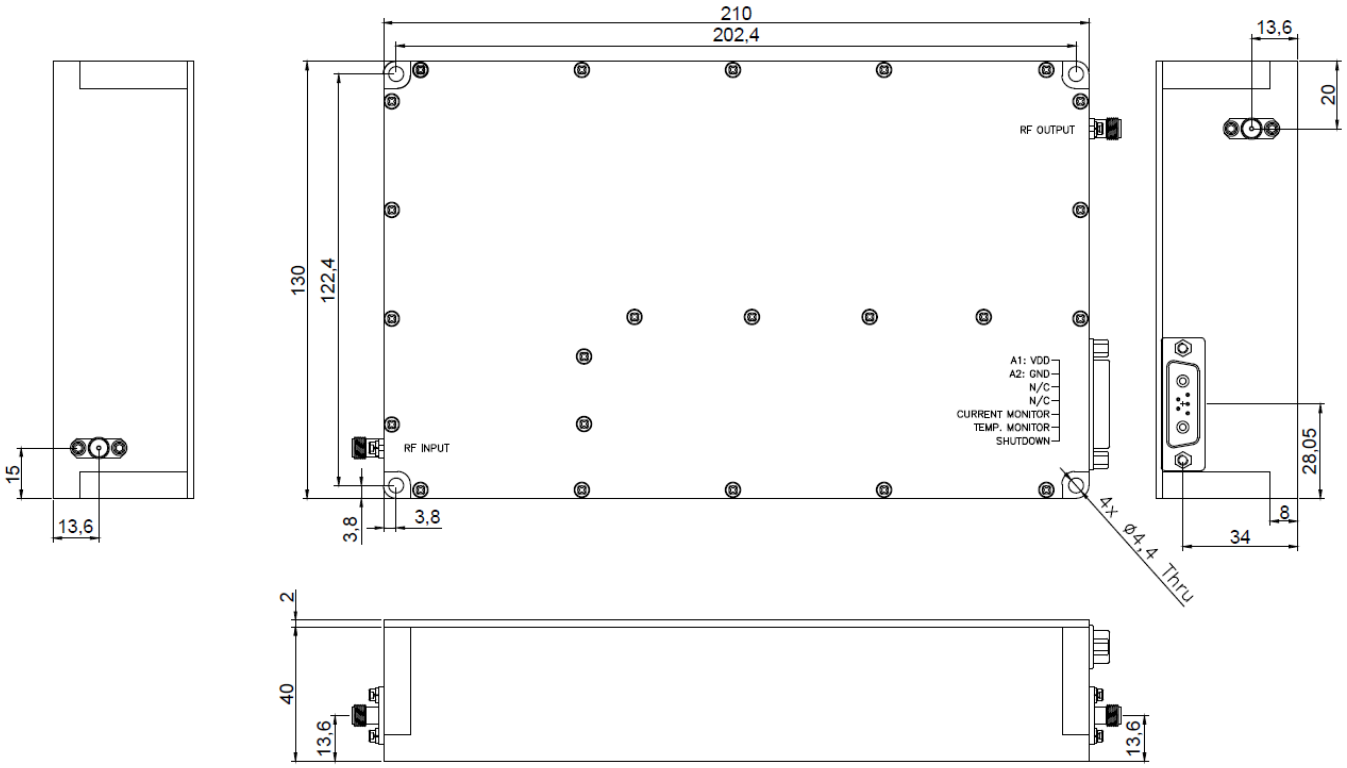
Pin	Function	Description
1	FWD	N/C
2	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
3	SHUTDOWN	TTL
4	N/C	
5	CURRENT SENSOR	I_D@20mV/100mA Typ
A1	VDD	50VDC
A2	GND	Ground

OUTLINE DRAWING



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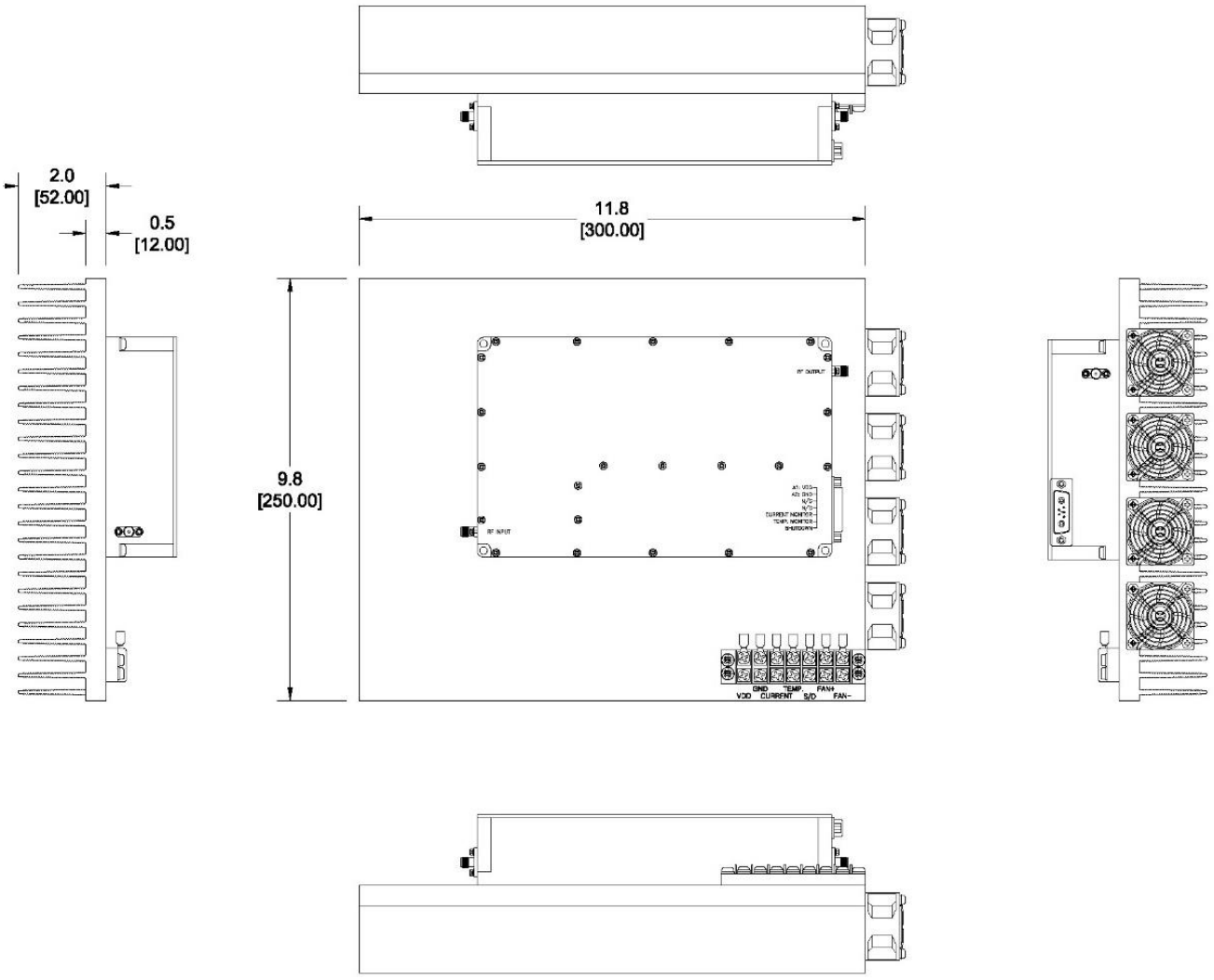
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OUTLINE DRAWING WITH OPTIONAL HEATSINK



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