HD30977
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for pulse applications and other modulations standards
Built-in protection circuits
High reliability and ruggedness
Extended temperature range using built-in heating element

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 4.0 GHz	
Power Output Pulse	200 Watt Min	Peak Pulse
Pulse Width	100 μSec Nom	
Pulse Duty Cycle	10 % Nom	
Power Gain	53 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 VDC Nom	
Current Consumption @ rated Pout	25 Amp Peak Max / 3 Amp Avg	
Max Input Power	+10 dBm	Without damage
Load VSWR Protection	∞ : 1	At rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Extended Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	300 X 220 X 32 mm	Excluding Connectors
Weight	TBD gr.	Max Weight
RF Connectors In/Out	SMA female / Type N female	
DC Power / Interface Connector	7W2 - 7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

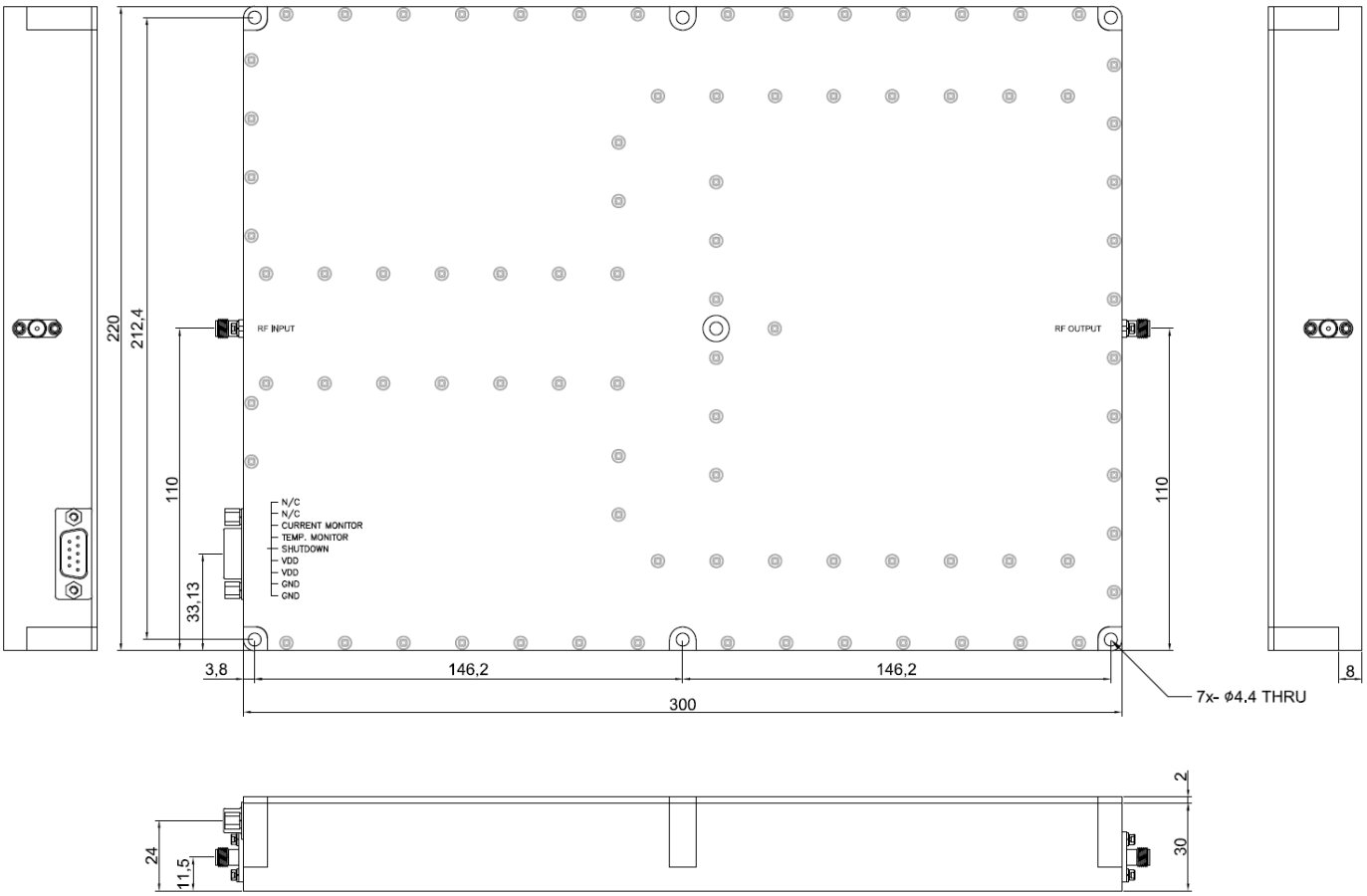
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	OPTION 101 - Forward power detect
2	VVA	OPTION 103 - Variable Voltage Attenuator
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL “Hi” = Disable Function @ 50mS (**Option**: 5uS Trigger/Pulse Modulator)
A1	VDD	28VDC
A2	GND	Ground

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OUTLINE DRAWING



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