Communications Corp.

HD30978
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
High power S-Band pulse applications
Booster gain, suitable for high power combining
Small form factor & light weight
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes
Operating Frequency Range	2050 - 2250 MHz			
Power Output Pulse	700 Watt Nom			Peak Pulse
Input Pulse Characteristics	Width	PRF		
	4µS	1KHz		
Power Gain	20 dB Nom			
Power Gain Flatness	2.0 dB p-p Max			Constant input power
Input / Output Return Loss	10 dB Min			Relative to 50 Ohm
Harmonics	>30 dBc Typ			At rated Pout
Non Harmonics Spurious	>60 dBc			
Operating Voltage	28 VDC Nom			
Current Consumption	45 Amp Peak			At rated pulse output
Max Input Power	10 Watt			Without damage
Load VSWR Protection	∞ : 1			

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	300 x 250 x 41mm	Excluding Connectors
Weight	TBD	
RF Connectors In/Out	SMA / Type-N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

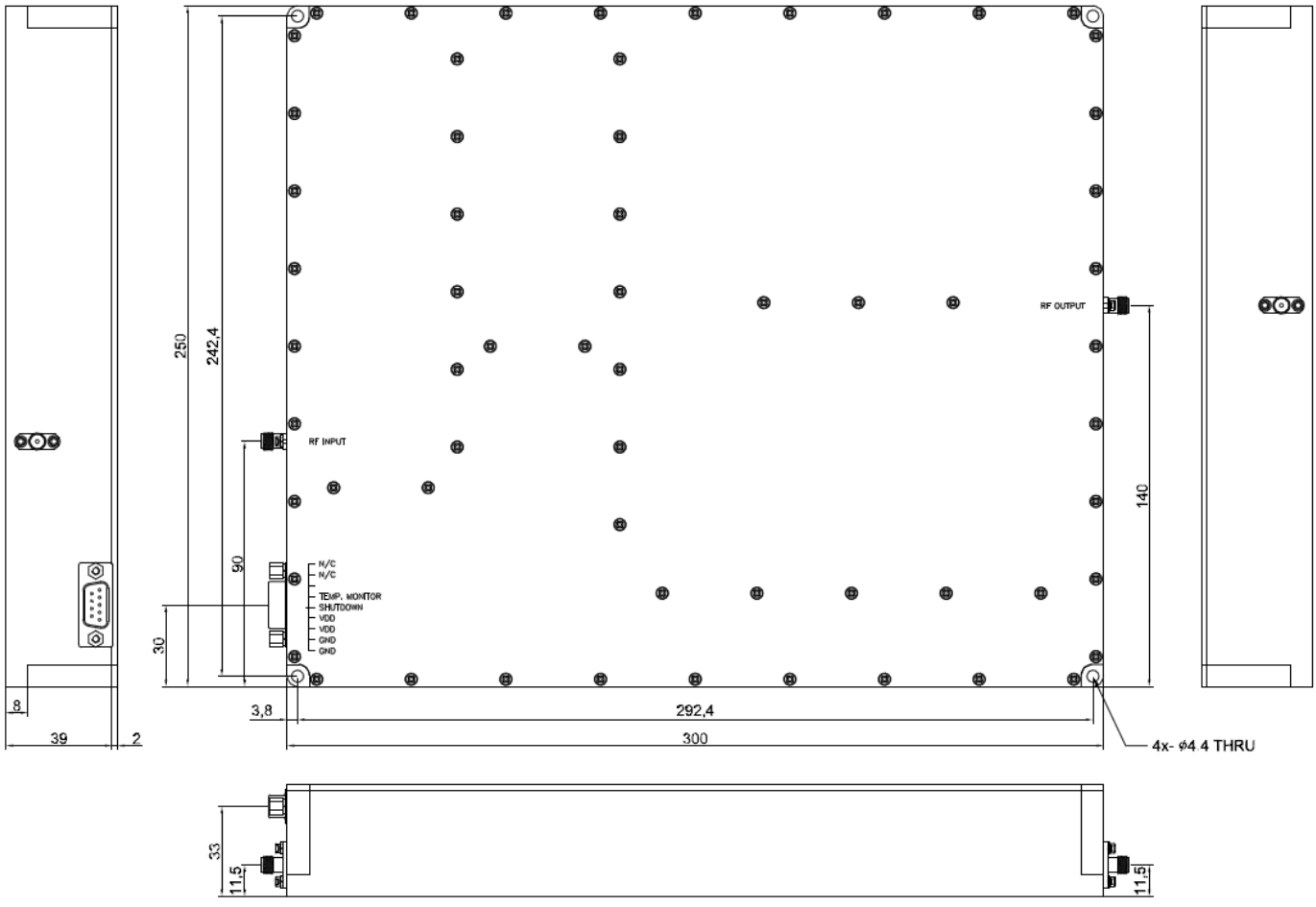
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D-SUB CONNECTOR PIN ASSIGNMENT

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	TTL "Hi" = Disable Function @ 50mS (**Option**: 5uS Trigger/Pulse Modulator)
A1	VDD	28VDC
A2	GND	Ground

OUTLINE DRAWING



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