HD35212
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Ruggedized, compact Class AB high power pulse SSPA
Suitable for S-Band, high power Radar applications
Internal capacitive bank provides low output droop over extended pulse widths



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	2.7 - 3.1 GHz				
Power Output @ Pulse	500 Watt Min			Peak Pulse	
Power Gain	57 dB Min				
Pulse Characteristics	**Width (tp)**	**Duty (δ)**	**PRF**	**Rise / Fall**	**Droop**
	10 µS	1 %	10 KHz	<100 nS Max	<0.5 dB Max
Input Return Loss	-12 dB Max			Relative to 50 Ohm	
Harmonics	-30 dBc Max			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	50 VDC Nom				
Current Consumption	7 Amp Avg Typ			δ = 20%, tp = 10µS	
Input Power Protection	+3 dBm Max			<10 Sec without damage	
Load VSWR Protection	∞ : 1			Internal output Isolator	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +70°C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	180 x 120 x 32 mm	Excluding connectors
Weight	4 Kg. Typ	
RF Connectors In/Out	SMA Female / Type N Female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	7W2
Cooling	External Heatsink	Forced air required

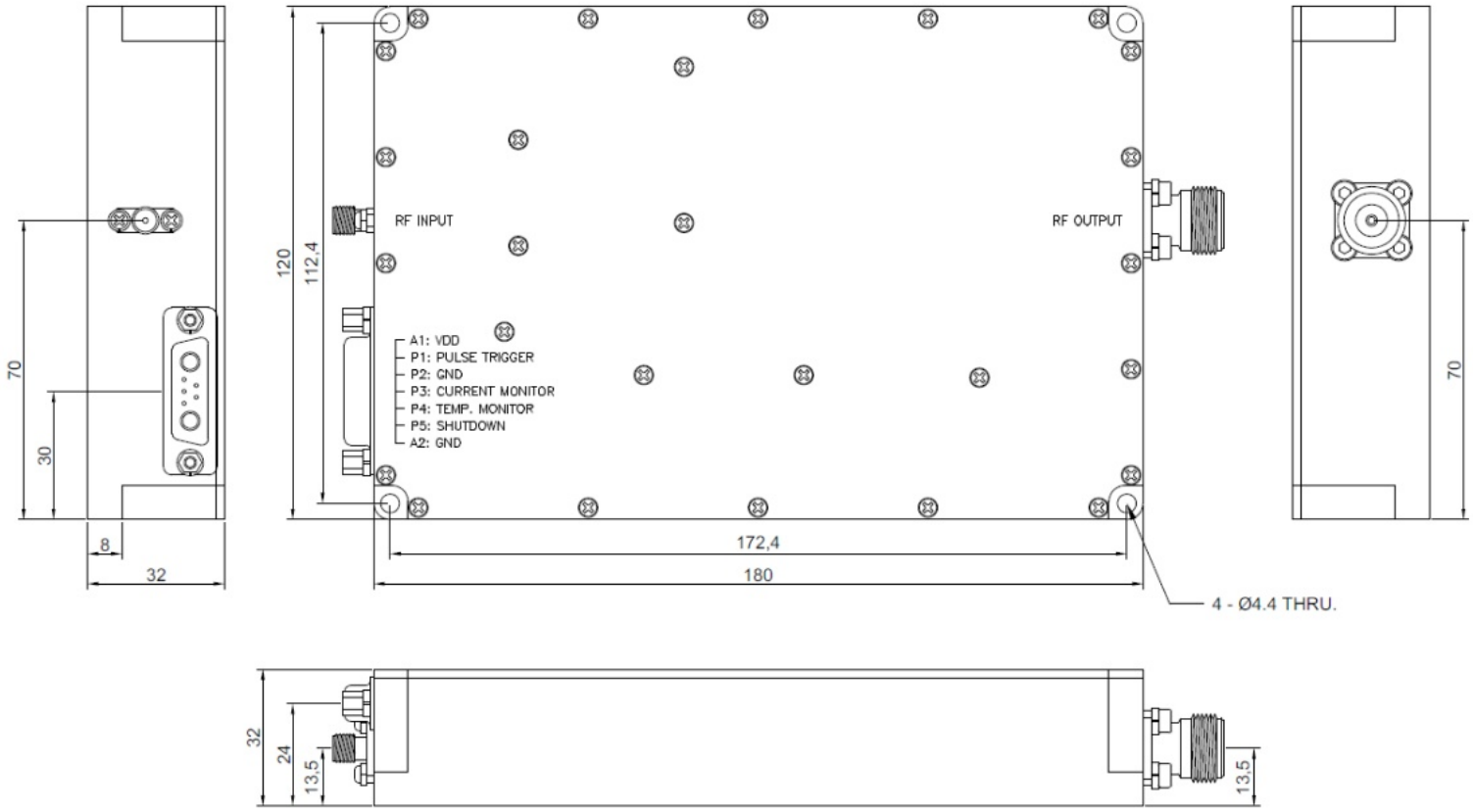
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
P1	PULSE TRIGGER	Enable = TTL "High" - Disable = Open or TTL "Low"
P2	GND	Ground
P3	CURRENT SENSOR	I_D@50mV/100mA Typ
P4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
P5	SHUTDOWN	Enable = TTL "High" - Disable = Open or TTL "Low"
A1	VDD	+50VDC
A2	GND	Ground

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Specifications subject to change without notice. Specifications and drawings may vary with selected options.

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OUTLINE DRAWING



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