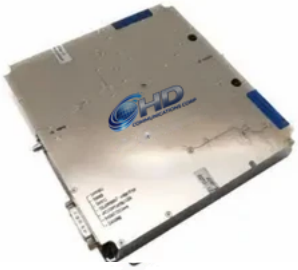
HD32309
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Class AB design
Instantaneous full X-Band high power pulse applications
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	8.0 - 12.0 GHz				
Power Output @ Pulse	100 Watt Min / 120 Watt Typ			Peak pulse	
Pulse Characteristics	**Width (tp)**	**Duty (δ)**	**Droop**	**Rise / Fall**	
	0.2 - 20 µS	up to 33 %	0.7 dB Max	<50 nS Typ	
Power Gain	50 dB Min			0dBm or less for rated Pout	
Power Gain Flatness	3.0 dB p-p Max				
Input Return Loss	-10 dB Max				
Harmonics	-25 dBc Max			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Noise Figure	10 dB Max				
Operating Voltage	32 VDC Nom				
Current Consumption	11.5 Amp Avg Max			δ = 33%, tp = 20µS	
Input Power Protection	+3 dBm Max			<10 Sec without damage	
Load VSWR Protection	∞: 1			External output Isolator required	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport[1]	

1 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	180 x 200 x 27 mm	Excluding connectors
Weight	4 Kg.	
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

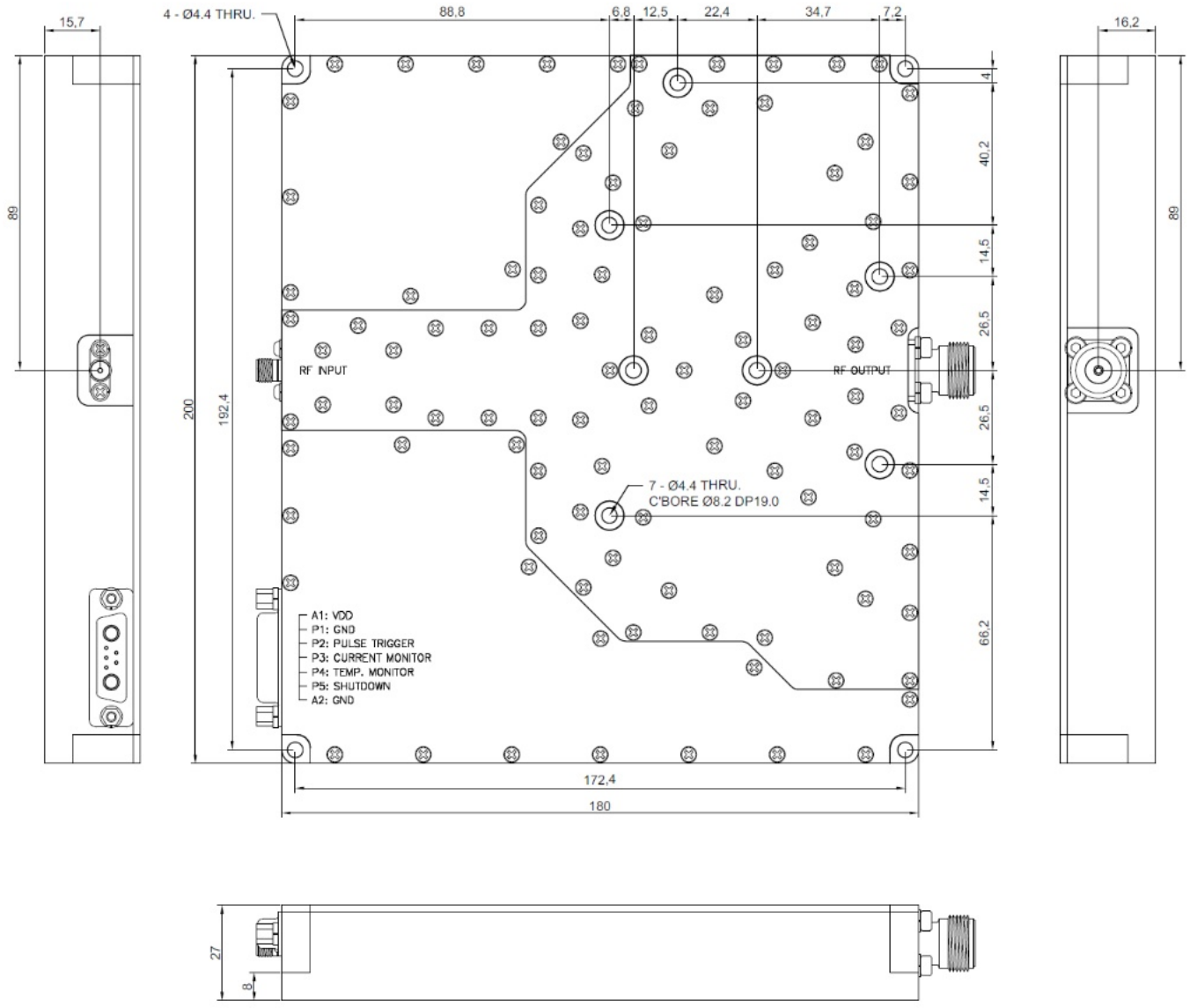
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Specifications subject to change without notice. Specifications and drawings may vary with selected options.

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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
P1	GND	Ground
P2	PULSE TRIGGER	Enable = TTL "High" - Disable = Open or TTL "Low"
P3	CURRENT SENSOR	I_D@20mV/100mA Typ
P4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
P5	SHUTDOWN	Enable = TTL "High" - Disable = Open or TTL "Low"
A1	VDD	+32VDC
A2	GND	Ground

OUTLINE DRAWING



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