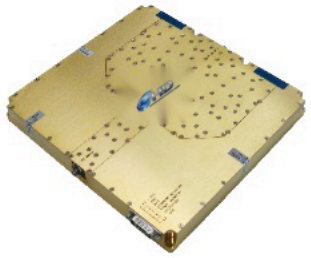
HD31861
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	7.5 - 10.0 GHz				
Power Output @ Pulse	300 Watt Typ			Peak pulse	
Pulse Characteristics	**Width (tp)**	**Duty (δ)**	**PRF**	**Rise / Fall**	**Droop**
	0.2 - 100 µS	1 %	10KHz	<50 nS Typ	0.7 dB Max
Power Gain	55 dB Nom				
Power Gain Flatness	3.0 dB p-p Max				
Input Return Loss	-10 dB Max				
Harmonics	-30 dBc Typ			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	40 VDC Nom				
Efficiency	20 % Typ			At rated Pout	
Input Power Protection	+3 dBm Max			<10 Sec without damage	
Load VSWR Protection	3 : 1 Max			<1 minute at rated Pout	

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	200 x 200 x 27 mm	
Weight	3 Kg.	
RF Connectors In/Out	SMA Female	Optional WR112
DC Power / Interface Connector	7-Pin Hybrid D-Sub	7W2
Cooling	External Heatsink	Forced air required

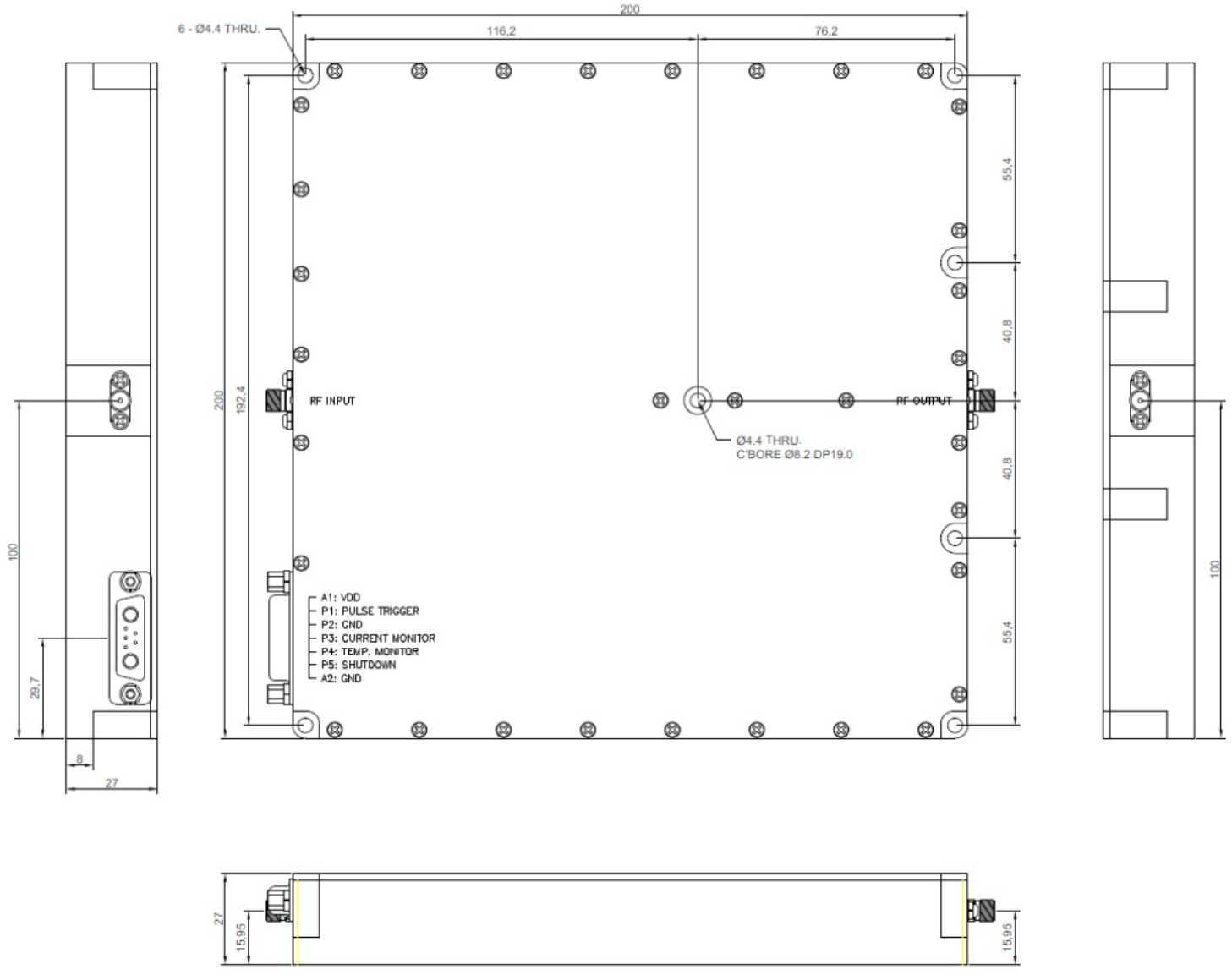
D-SUB CONNECTOR PIN ASSIGNMENT

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	+40VDC
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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