HD30976
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Class AB linear LDMOS design
Ruggedized, compact, light weight
Suitable for L-Band high power radar pulse applications
Internal capacitive bank provides low output droop
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	1.2 - 1.4 GHz				
Power Output @ Pulse	500 Watt Min			Peak Pulse	
Pulse Characteristics	**Width (tp)**	**Duty (δ)**	**Droop**	**Rise / Fall**	
	120 µS Max	10 % Max	<1.0 dB	<100 nS Max	
Power Gain	57 dB Min			Pin = 0dBm for rated Pout	
Input Return Loss	-12 dB Max				
Harmonics	-30 dBc Max			At rated Pout	
Operating Voltage	40 - 42 VDC Nom				
Current Consumption	4 Amp Avg / 40 Amp Peak Max			δ = 10%, tp = 120µS	
Input Power Protection	+8 dBm Max				
Load VSWR Protection	5 : 1 Max				

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
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	200 x 105 x 30 mm	Excluding connectors
Weight	1.2 Kg.	
RF Connectors In/Out	SMA Female / Type N Female	
DC Power / Interface Connector	Feed Thru	
Cooling	External Heatsink	Forced air required

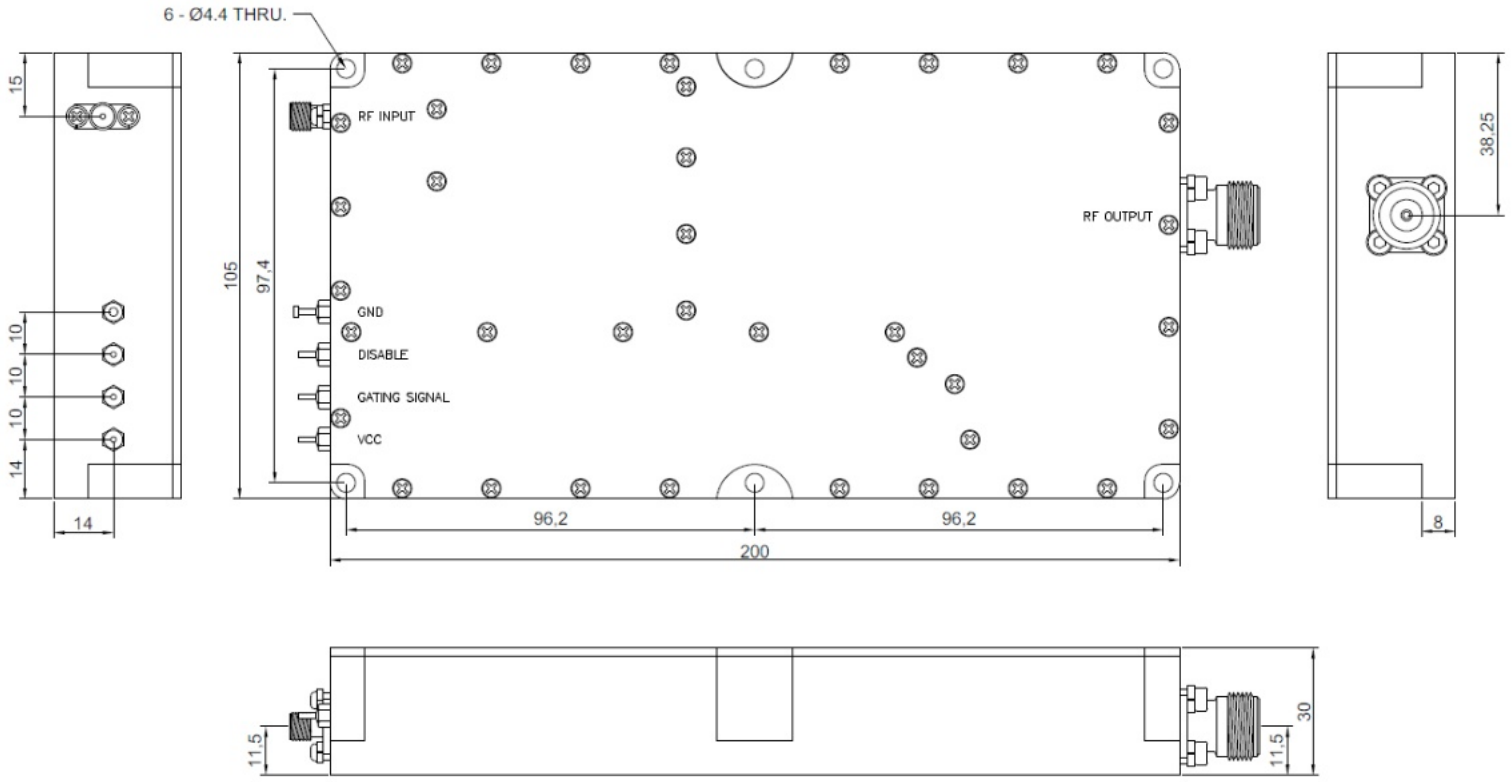
PIN ASSIGNMENT

Pin	Function	Description
1	GND	Ground
2	ENABLE / DISABLE	Enable = TTL "High" - Disable = Open or TTL "Low"
3	GATING SIGNAL	Gate On= TTL "High" - Gate Off = Open or TTL "Low"
4	VDD	+40 - 42VDC

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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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