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	1.2 - 1.4 GHz				
Power Output	500 Watt Min			Peak Pulse	
Peak Power Gain	57 dB Min			Pin = 0dBm for rated Pout	
Input Pulse Characteristics	**Duty Cycle (δ)**	**Width (tp)**	**Rise / Fall**	**Droop**	
	10 % Max	120 µS Max	100 nS Max	<1 dB	
Pulse Droop	<1 dB				
Input Return Loss	-12 dB Max			Relative to 50 Ohm	
Harmonics	-30 dBc Max				
Operating Voltage	40 - 42 VDC Nom				
Current Consumption	4.0 Amp Avg / 40 Amp Peak Max			@ δ = 10%	
Input Power Protection	+8 dBm Max				
Load VSWR Protection	5 : 1 Max				

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Note
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	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

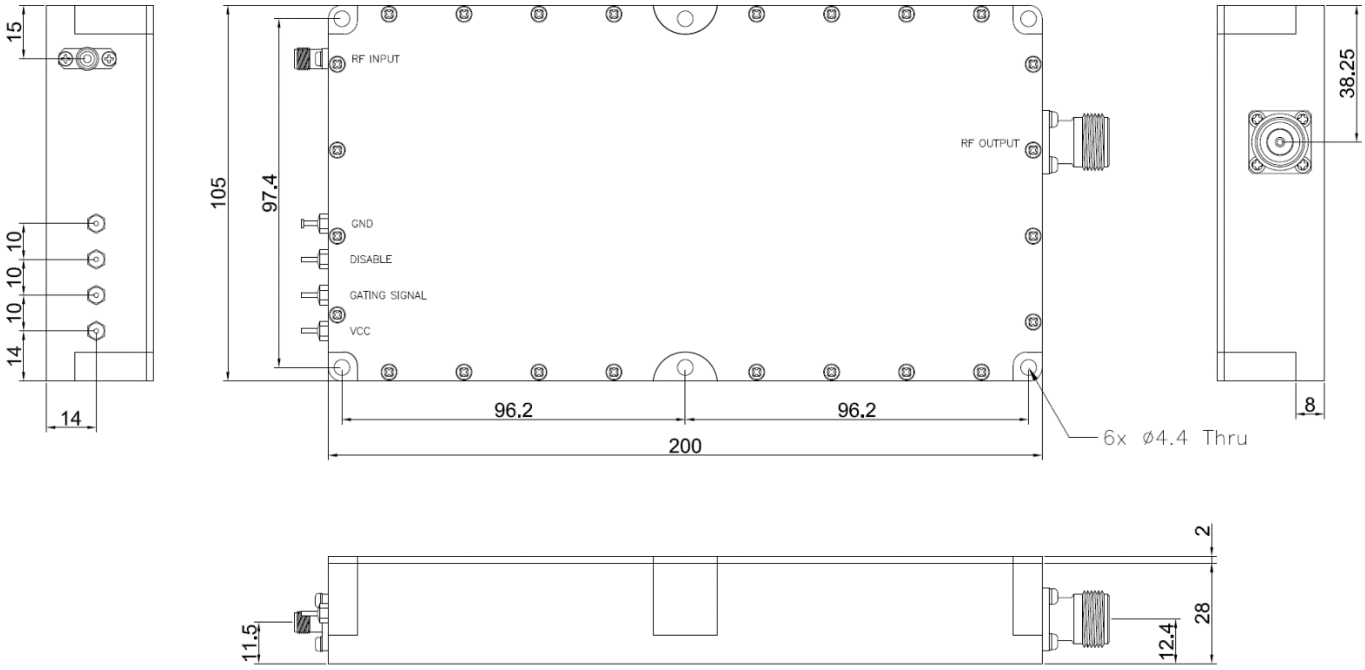
FEED THRU PIN ASSIGNMENT

	VDD	+40 - 42VDC
	DISABLE	Enable = Open or TTL “Lo”; Disable = TTL “Hi” (<3.2V)
	GATING SIGNAL	ON = Open or TTL “Hi” (>3.2V); OFF = Short or TTL “Lo”
	GND	Ground

HD Communications Corp. 338 Jericho Tpke. Ste 387
Syosset, NY 11791
Tel: (631) 588-3877 Email: sales@hdcom.com

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OUTLINE DRAWING WITH GATING INPUT



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