HD30969
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Class AB linear LDMOS design
Instantaneous wide bandwidth
Designed for HF high peak power pulse applications
Suitable for all single channel modulation standards
Built-in monitoring and protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	1 - 20 MHz				
Power Output @ Pulse	400 Watt Min			Peak pulse	
Pulse Characteristics	**Width (tp)**	**Duty (δ)**	**Droop**	**Rise / Fall**	
	100 µS Max	20 % Max	<0.5 dB	100 nS Max	
Power Gain @ Peak Pulse	40 dB Min			+16dBm or less for rated Pout	
Power Gain Flatness	2.0 dB p-p Max				
Input Return Loss	-10 dB Max				
Harmonics 2^{nd}/ 3^{rd}	<-20 dBc Typ / -15 dBc Typ			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	50 VDC Nom				
Current Consumption	8 Amp Avg			δ = 20%, tp = 100µS	
Input Power Protection	+23 dBm Max			<10 Sec without damage	
Load VSWR Protection	∞ : 1			<1 minute at rated Pout	
Turn On / Off Speed	10 µSec Max				

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	200 x 106 x 33 mm	Excluding connectors
Weight	-	
RF Connectors In/Out	SMA female / Type-N female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

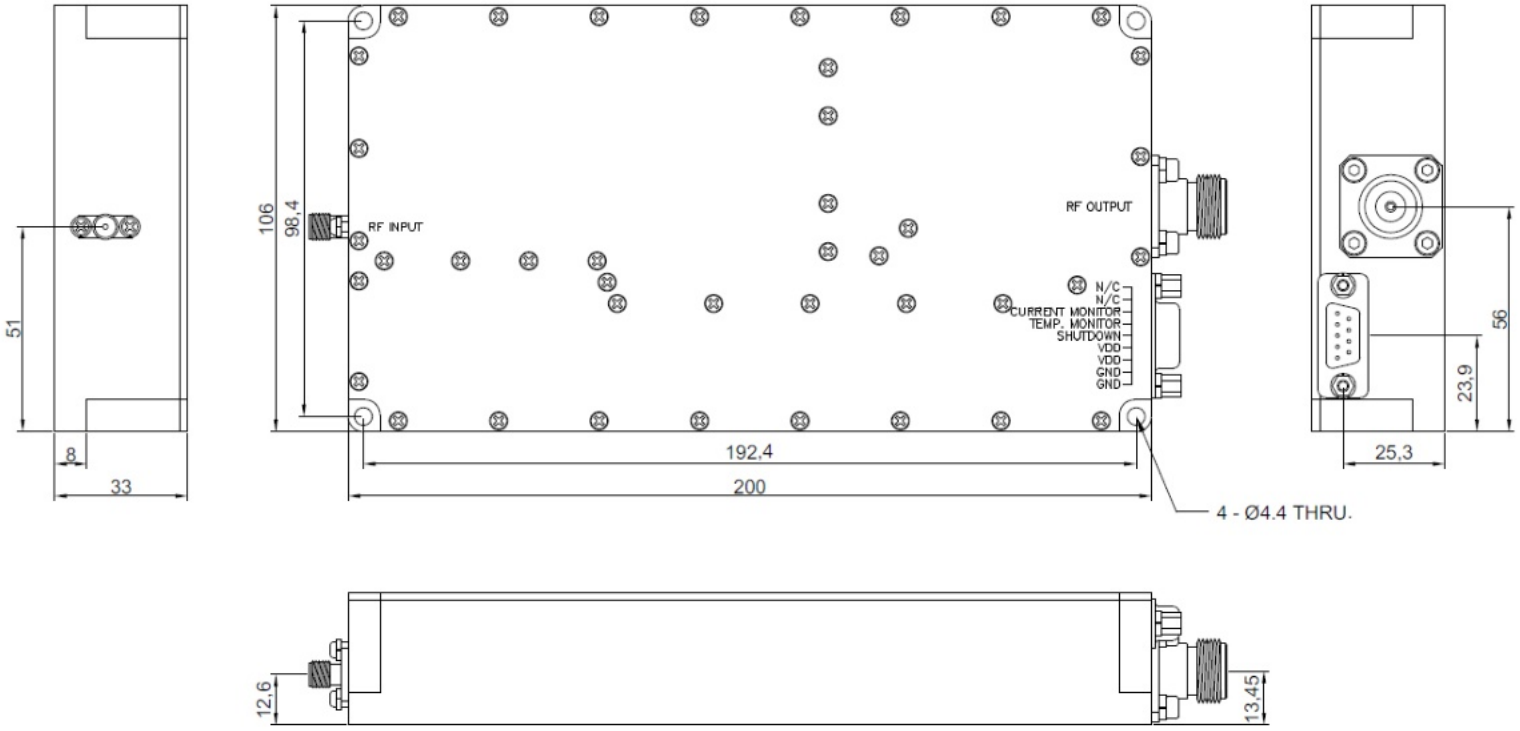
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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	N/C
2	N/C	N/C
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL High or Open / Disable = TTL Low or Short
6, 7	VDD	50VDC
8, 9	GND	Ground

OUTLINE DRAWING



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