HD30969
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
Instantaneous wide bandwidth
Suitable for all modulations standards
Built-in monitoring and protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1 - 20 MHz	
Power Output Peak Pulse	400 Watt Min	Pulse
Power Gain	40 dB Min	
Pulse Width	100 µS Max	
Pulse Duty Cycle	20 % Max	
Power Gain Flatness	2.0 dB p-p Max	
Temperature Stability	1.0 dB Max	Over 0 - 50°C
Input Return Loss	10 dB Min	Relative to 50 Ohm
Harmonics	>20dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Noise Figure	6 dB Max	
Operating Voltage	24 VDC Nom	
Current Consumption	60 Amp Max Peak	
Max Input Power	+23 dBm	Without damage
Load VSWR Protection	∞ : 1 Min	
Turn On / Off Speed	5 µSec 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 Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	250 X 200 X 41 mm	Excluding Connectors
Weight	TBD	Typical Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

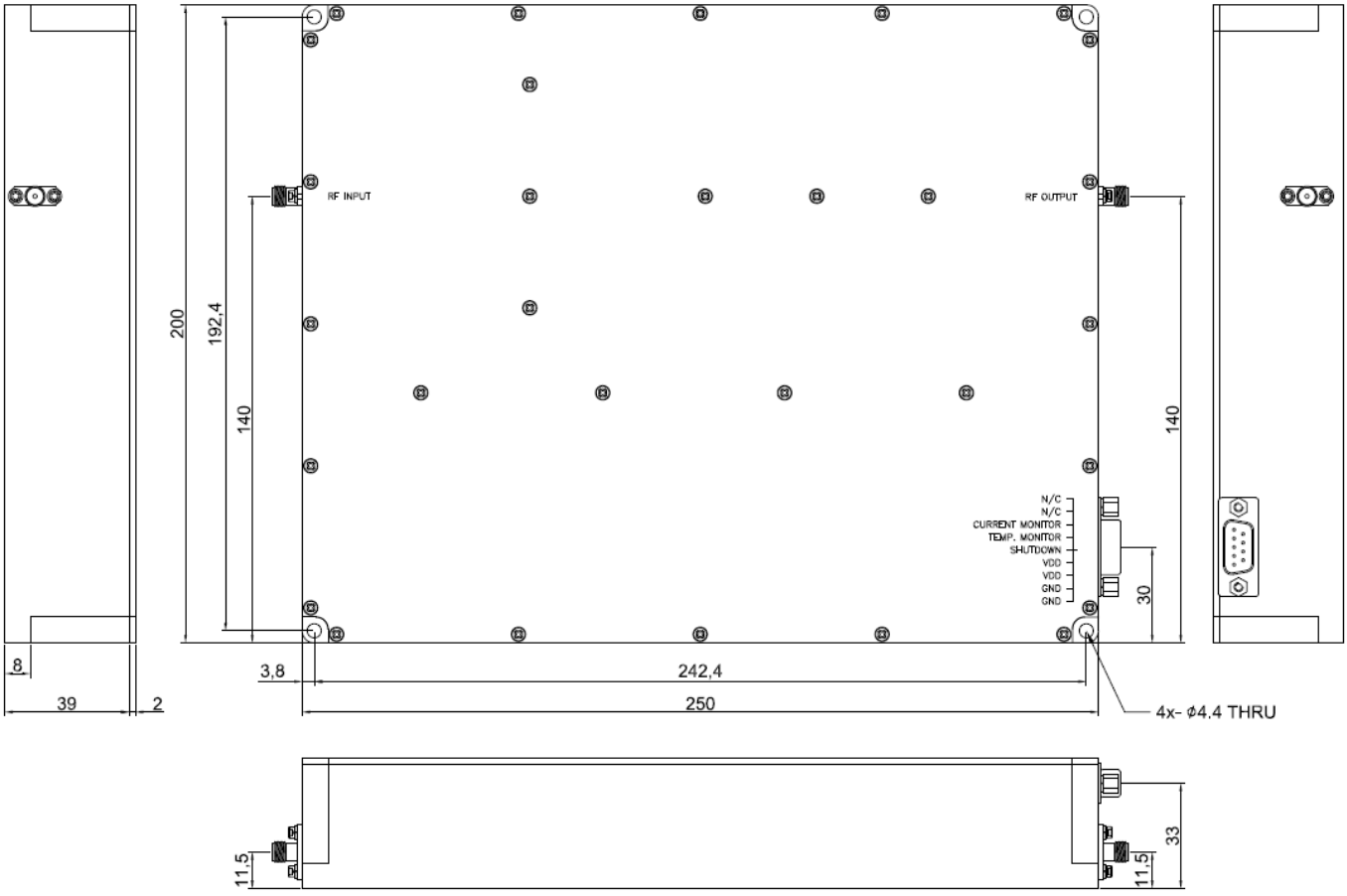
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	VVA	N/C
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUDOWN	TTL “Hi” = Disable Function @ 50mS (**Option**: 5uS Trigger/Pulse Modulator)
6, 7	VDD	24VDC
8, 9	GND	Ground

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OUTLINE DRAWING



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