HD31218
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
Instantaneous wide bandwidth
Suitable for all single channel modulations standards
Small form factor & light weight
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	6 - 20 MHz	
Power Output CW	220 Watt Typ	
Power Output @ P1dB GCP	200 Watt Min	100Watt Typ
Power Gain	53 dB Min	
Power Gain Flatness	2.0 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max	Relative to 50 Ohm
Harmonics 2nd/3rd	<-20 dBc / -12 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Noise Figure	6 dB Max	
Operating Voltage	32 VDC Nom	
Current Consumption	12 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	∞ : 1	<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 106 x 28 mm	Excluding connectors
Weight		
RF Connectors In/Out	SMA / Type-N female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

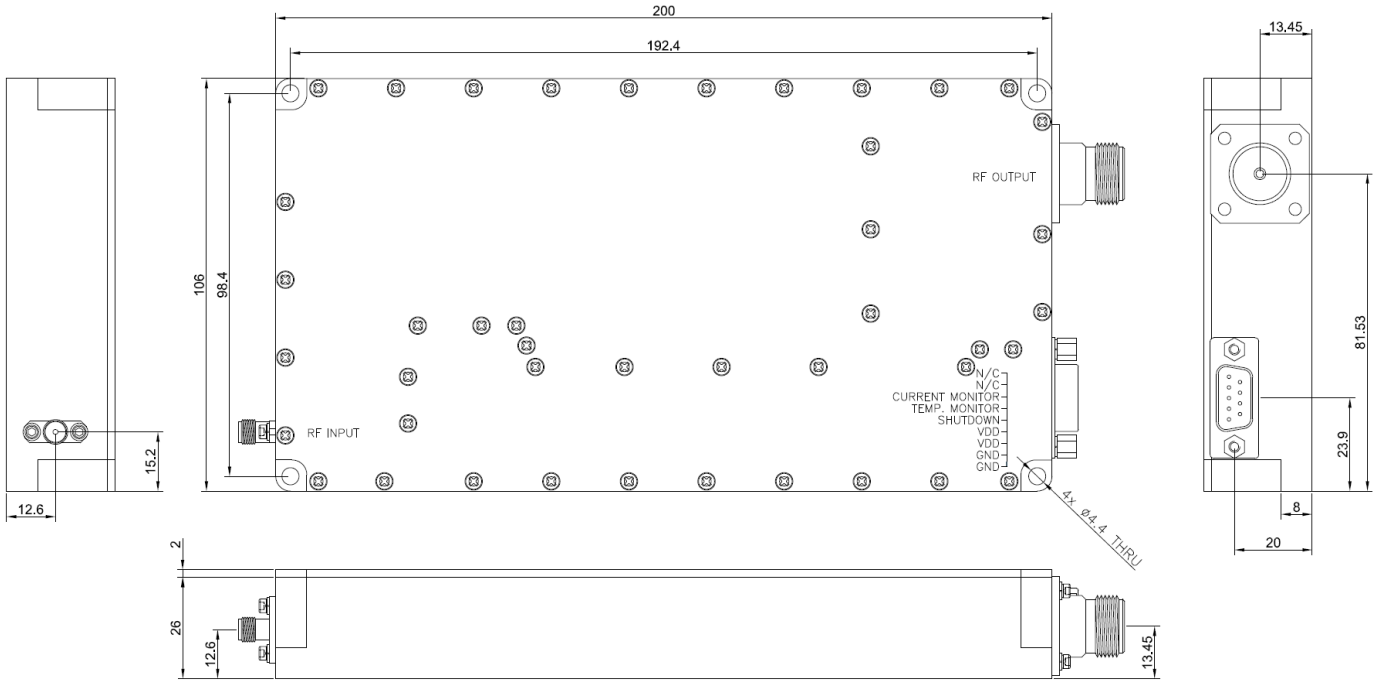
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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	OPTION 101 - Forward power detect
2	VVA	OPTION 103 - Variable Voltage Attenuator
3	CURRENT SENSOR	I_D @ 50mV/100mA Typ
4	TEMP SENSOR	V_T @ 10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1	VDD	32VDC
A2	GND	Ground

OUTLINE DRAWING



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