HD31255
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	800 - 2500MHz	
Power Output	200 Watt Min / 250 Watt Typ	CW
Power Gain	53 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	43 dBm/Tone, Δ = 1MHz
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	30 - 32 VDC	
Current Consumption	20 Amp Max	At rated Pout
Max Input Power Protection	+8 dBm	Without damage for 10 Sec
Load VSWR Protection	∞ : 1	At rated Pout for 1 minute
Turn On / Off Speed	5 µSec Max	Optional

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	220 x 146 x 27 mm	Excluding Connectors
Weight	1.6 Kg.	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

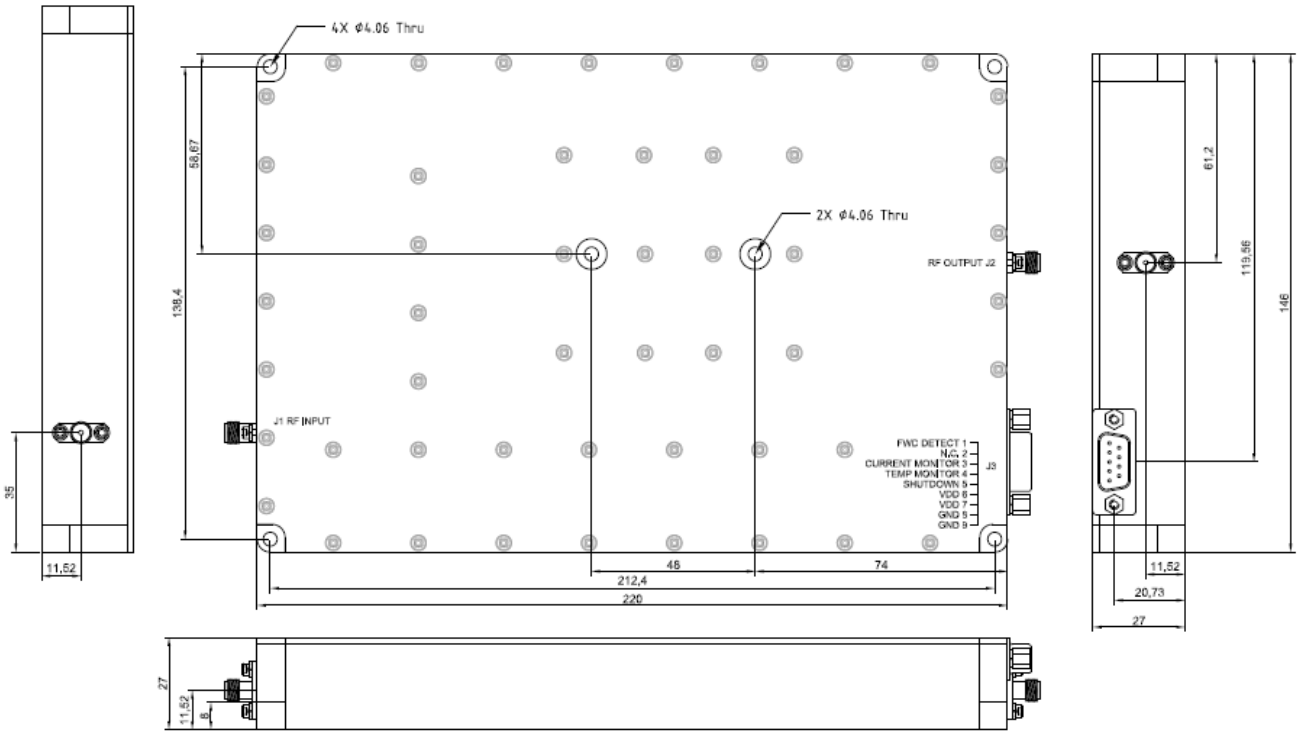
D-SUB HYBRID CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	OPTION 101 - Forward power detect
2	VVA	OPTION 103 - Variable Voltage Attenuator
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1	VDD	32VDC
A2	GND	Ground

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OUTLINE DRAWING - OPTION 101



OPTION ORDERING INFORMATION:

OPTION	Function	Description
101	FWD	Forward power detect
103	VVA	Variable Voltage Attenuator

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