HD31034
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	1200 - 1400 MHz	Option: 850 - 1400 MHz
Power Output Psat	500 Watt Min / 600 Watt Typ	CW
Power Gain	57 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
2-Tone Intermodulation (IMD)	<-30 dBc Typ	47dBm/Tone, Δ = 1MHz
Harmonics	<-30 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	32 VDC	
Current Consumption	52 Amp Max	At rated Pout
Input Power	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	∞ : 1	<1 minute at rated Pout
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-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	350 x 250 x 32 mm	Excluding connectors
Weight	6.6 Kg.	
RF Connectors In/Out	SMA female / Type N female	
DC Power / Interface Connector	9W4 - 9-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

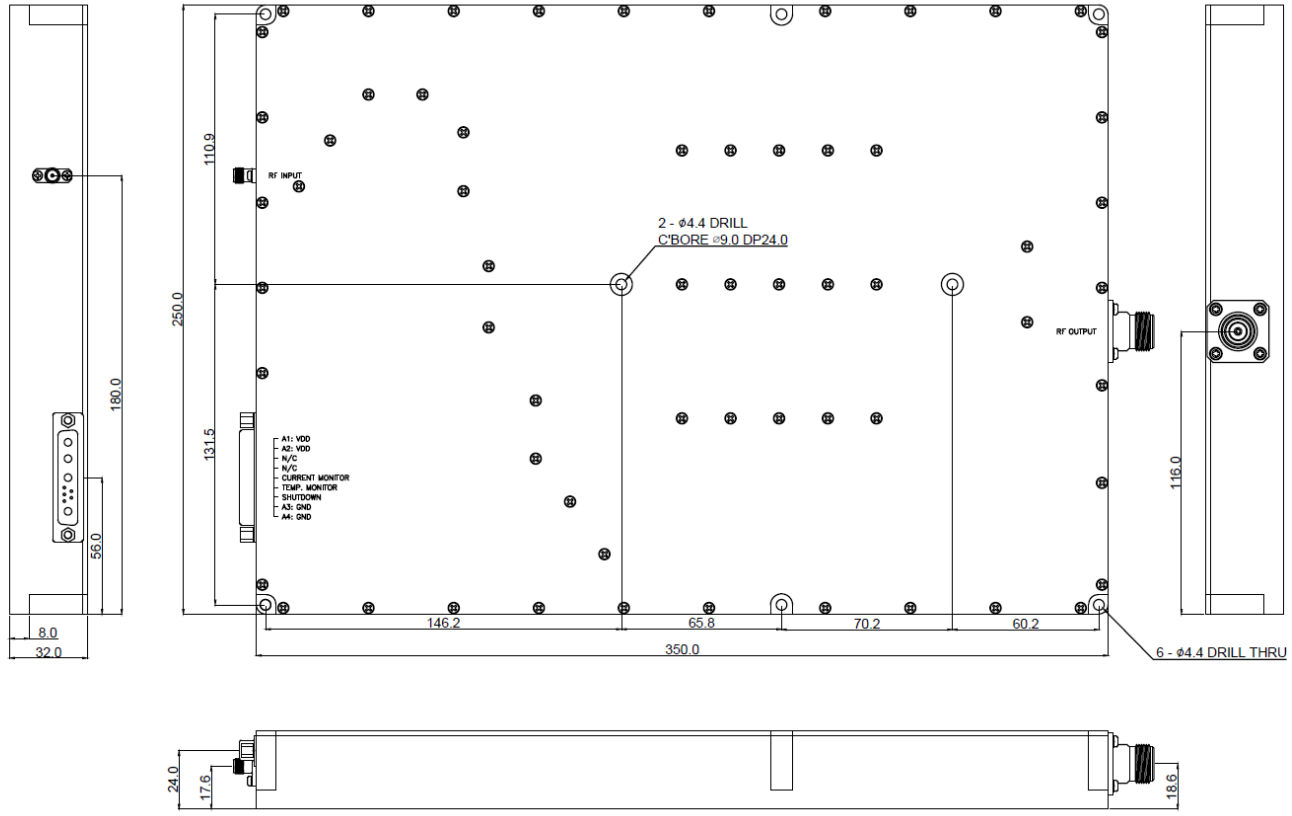
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	OPTION 101 - Forward power detect
2	VVA	OPTION 103 - Variable Voltage Attenuator
3	CURRENT SENSOR	I_D@10mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL “Hi” or Open; Disable = TTL “Lo” or Short
A1, A2	VDD	32VDC
A3, A4	GND	Ground

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OUTLINE DRAWING



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