HD31564
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class A/AB linear design
High Power Advanced technology devices
Instantaneous wide bandwidth
Suitable for all single channel modulation standards
Small form factor & light weight
Built-in monitoring & protection circuits
High efficiency, with unprecedented reliability and ruggedness
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ELECTRICAL SPECIFICATIONS : 50 Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	100 - 3000 MHz Min	
Power Output @ Psat	12 Watt Min / 20 Watt Typ	CW
Power Output @ P1dB	10 Watt Min	
Power Gain	41 dB Min	0dBm or less for rated Pout
Power Gain Flatness	4.0 dB p-p Max	Constant input power
Input Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	30dBm/Tone, Δ = 1MHz
Harmonics 2^{nd} / 3^{rd}	2^{nd} -12dBc Typ / 3^{rd} -20dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 30 VDC	
Current Consumption	3 Amp Max	At rated Pout
Max input Power Protection	+8 dBm	Without damage
Load VSWR Protection	∞ : 1	<1 Min at rated Pout

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	125 x 63 x 27 mm	Without connectors
Weight	300 gr.	Typical weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

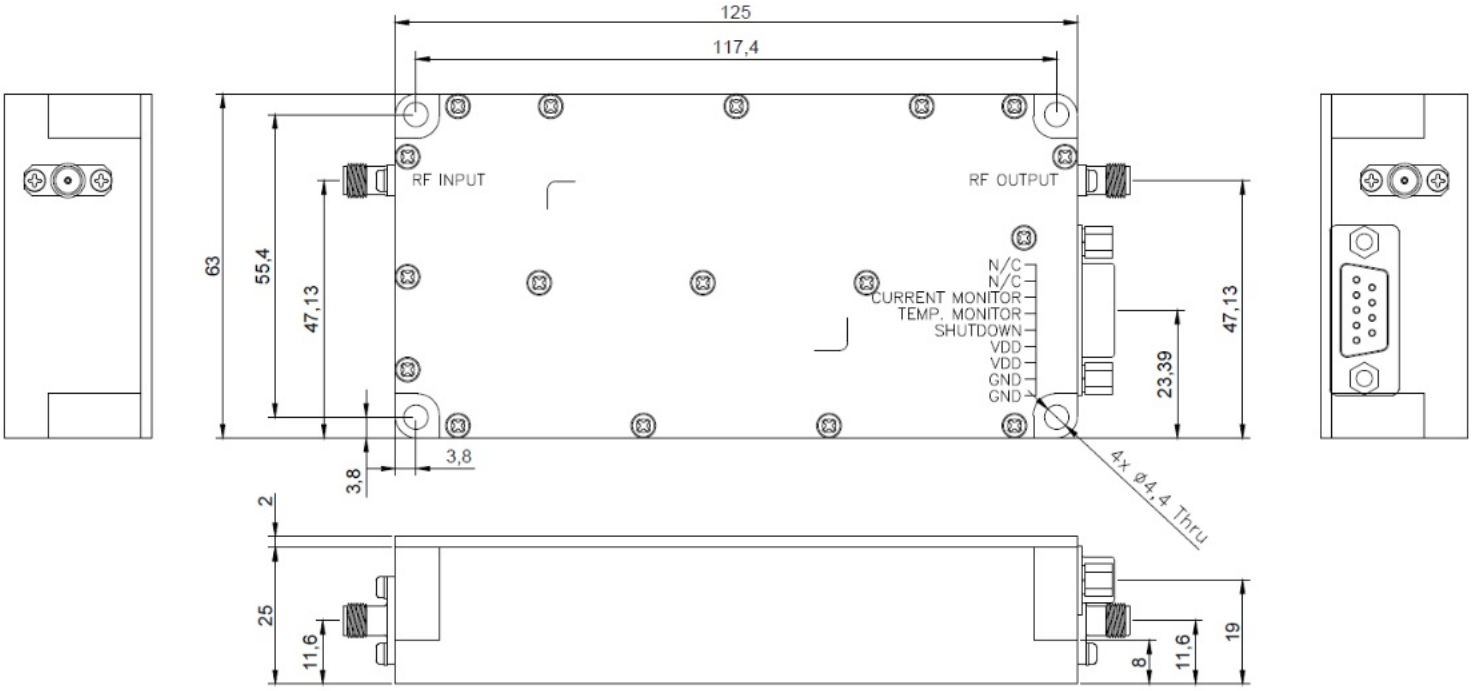
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	N/C
2	VVA	Option-103 (With larger housing dimensions)
3	CURRENT SENSOR	ID@50mV/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	28VDC
8, 9	GND	Ground

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Specifications subject to change without notice. Specifications and drawings may vary with selected options.

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OUTLINE DRAWING



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