HD31153
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class A linear GaN hybrid design
Instantaneous wide bandwidth
Small form factor and light weight
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output	5 Watt Min / 7 Watt Typ	CW
Power Gain	37 dB Min	
Power Gain Flatness	4.0 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	27dBm/Tone, Δ = 1 MHz
Harmonics	-15 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	10 dB Max	
Operating Voltage	32 VDC Nom	
Current Consumption	2.0 Amp Max	At rated Pout
Max Input Power	+3 dBm	<10 Sec without damage
Load VSWR Protection	3 : 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-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	80 x 80 x 25 mm	Excluding connectors
Weight	350 gr.	Copper housing
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

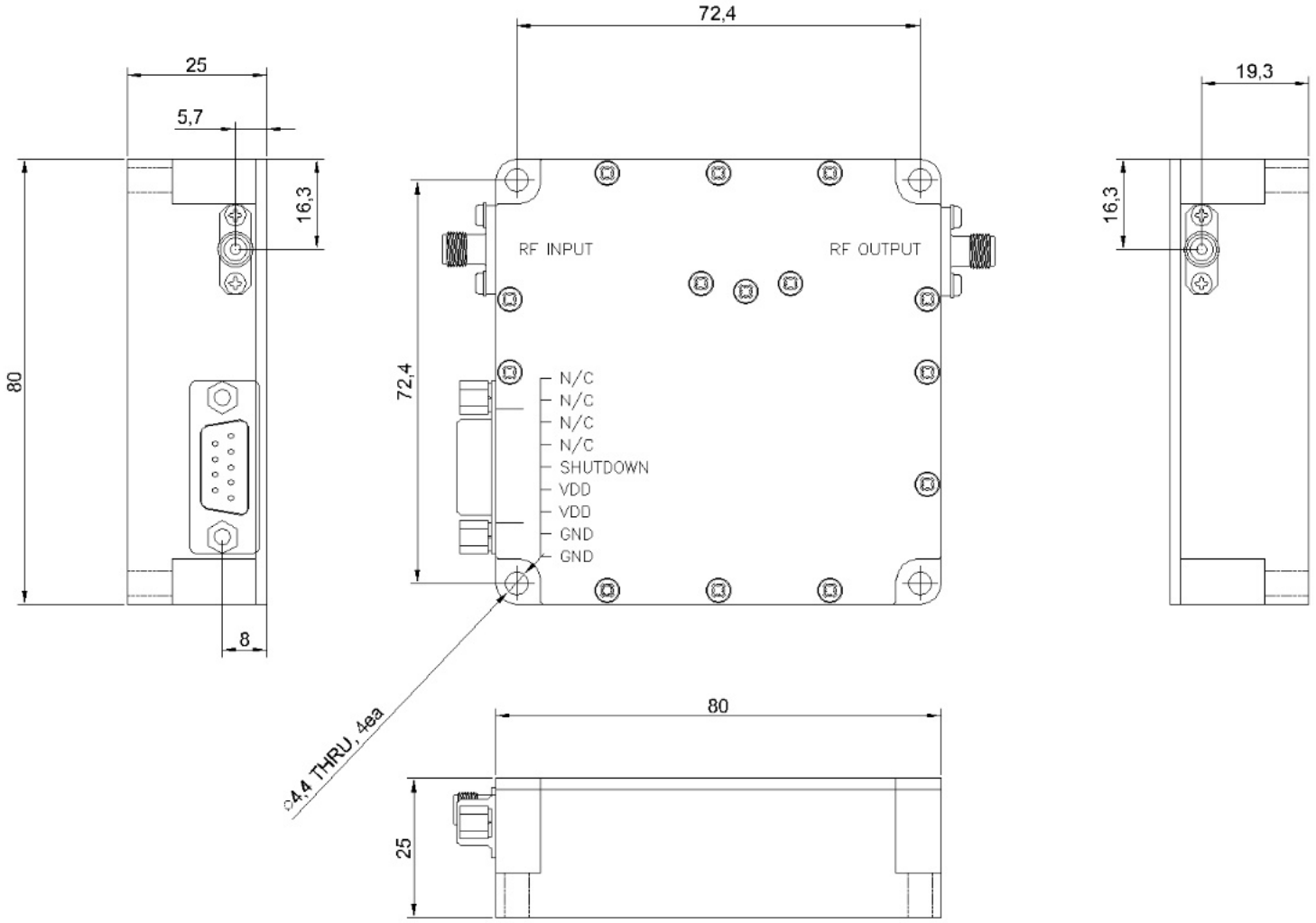
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Reserved
2	VVA	Reserved
3	CURRENT SENSOR	Reserved
4	TEMP SENSOR	Reserved
5	SHUTDOWN	Enable = TTL "High" or OPEN / Disable = TTL "Low" or GND
6, 7	VDD	32VDC
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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