HD31923
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class A/AB linear GaN design
Instantaneous ultra-broad Bandwidth
Suitable for all single channel modulation standards
Small form factor and light weight
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 8.0 GHz	
Power Output @ P1dB	33 dBm (2 Watt) Min	CW
Power Gain	33 dB Min	0dBm or less for rated Pout
Power Gain Flatness	4 dB p-p Max	Constant input power
Input Return Loss	10 dB Typ	
2-Tone Intermodulation (IMD)	-30 dBc Typ	23dBm/Tone, Δ = 1MHz
Harmonics	-15 dBc Typ	At rated Pout
Noise Figure	10 dB Max	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	32 VDC Nom	
Current Consumption	1.5 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Max	<1 minute @ rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +70 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport[1]	

1 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	95 x 75 x 25 mm	Excluding connectors
Weight	500 gr. Typ	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	Feed Thru	
Cooling	External Heatsink	Forced air required

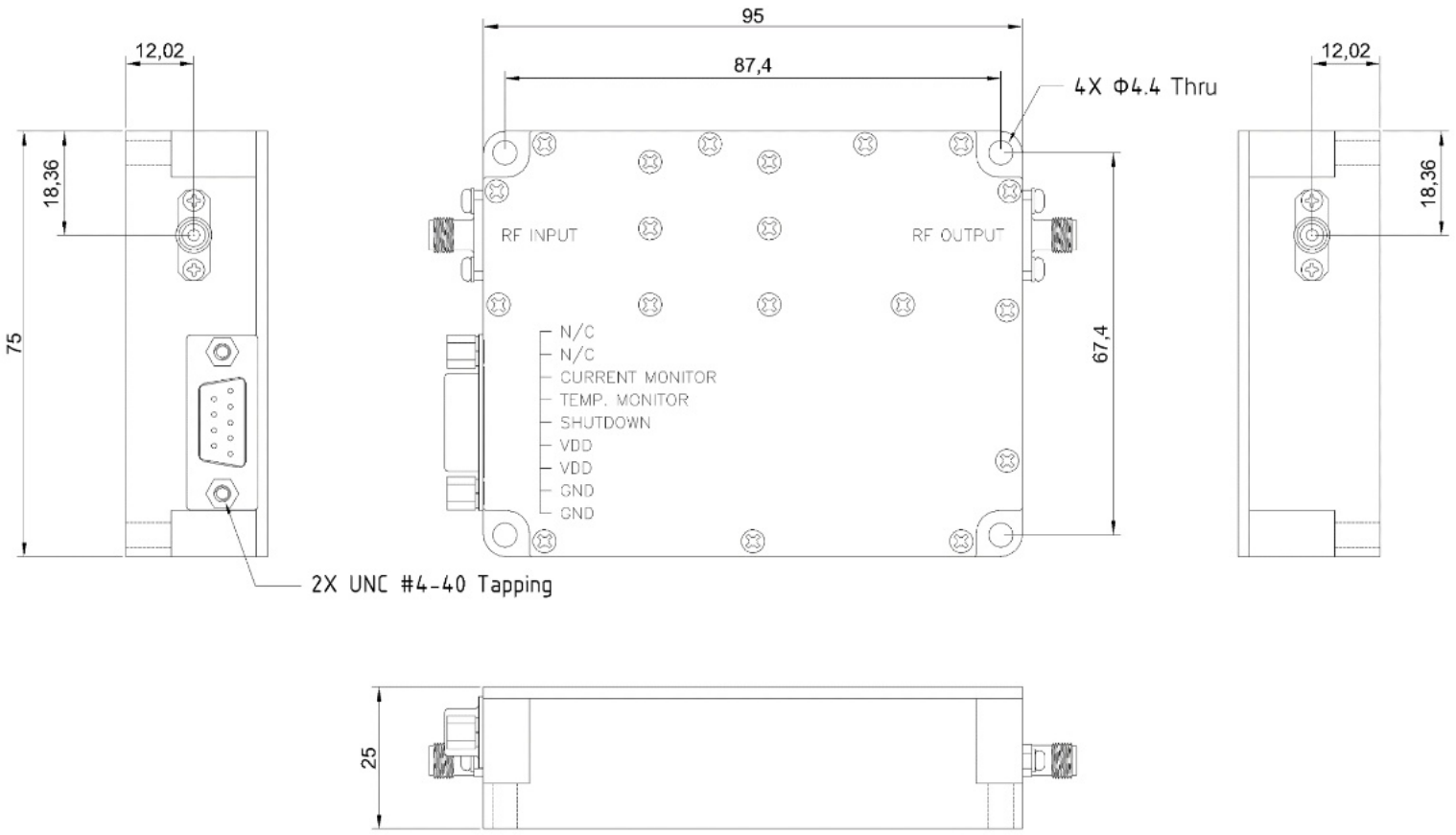
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	Reserved
2	N/C	Reserved
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = Open or TTL "High" (>3.2V); Disable = TTL "Low" (0V)
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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