HD31244
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMC-EMI/RFI, Lab, and general comm applications.
Compact Small form factor, light weight, high power density
High power advanced linear GaN device technology
Instantaneous P, L, & S-Bands ultra-wide 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	500 - 2500 MHz	
Power Output @ Psat	200 Watt Min	CW
Power Gain	53 dB Min	0dBm or less for rated Pout
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	43 dBm/Tone, Δ = 1MHz
Harmonics 2nd / 3rd	-15 / -20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	32 VDC Nom	
Current Consumption	24 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without Damage
Load VSWR Protection	5 : 1 Max	<1 minute at rated output
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	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	220 x 156 x 27 mm	Excluding connectors
Weight	1.8 Kg.	Max Weight
RF Connectors In/Out	SMA female / Type N female	
DC Power / Interface Connector	7W2 - 7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

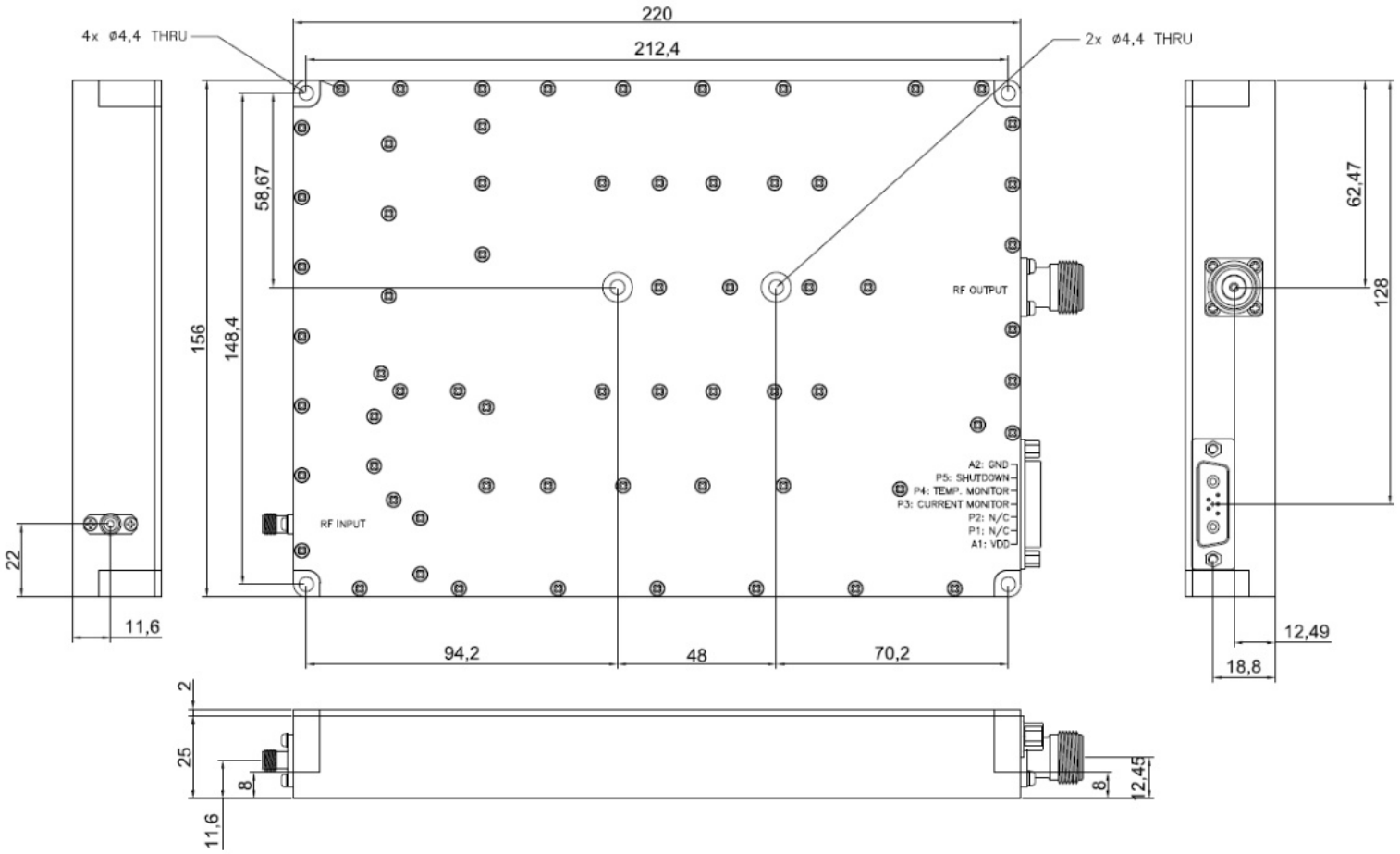
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	Not Used	N/C
2	Not Used	N/C
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "High" or Open; Disable = TTL "Low" or Short
A1	VDD	32VDC
A2	GND	Ground

338 Jericho Turnpike, Suite 387, Syosset NY, 11791 (631)-588-3877
www.rfamplifiers.com sales@hdcom.com. www.rfcomp.com
Specifications subject to change without notice. Specifications and drawings may vary with selected options.

HD31244
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



338 Jericho Turnpike, Suite 387, Syosset NY, 11791 (631)-588-3877
www.rfamplifiers.com sales@hdcom.com. www.rfcomp.com

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