HD33624
SOLID-STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Booster configuration suitable for combining
Instantaneous 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	200 Watt Min	CW
Power Gain	30 - 40 dB Min	
Power Gain Flatness	3.0 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	44 dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 30 VDC	
Current Consumption	26 Amp Max	At rated Pout
Nominal Input Power	+13 to +23 dBm	For rated Pout
Load VSWR Protection	∞ : 1	<1 minute at rated Pout
Turn On / Off Speed	5 µSec Max	Optional
Amplitude Matching	±1 dB p-p Max	Per batch
Phase Matching	±15 Degrees	Per batch

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	220 x 156 x 27 mm	Excluding connectors
Weight	1.8 Kg.	
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

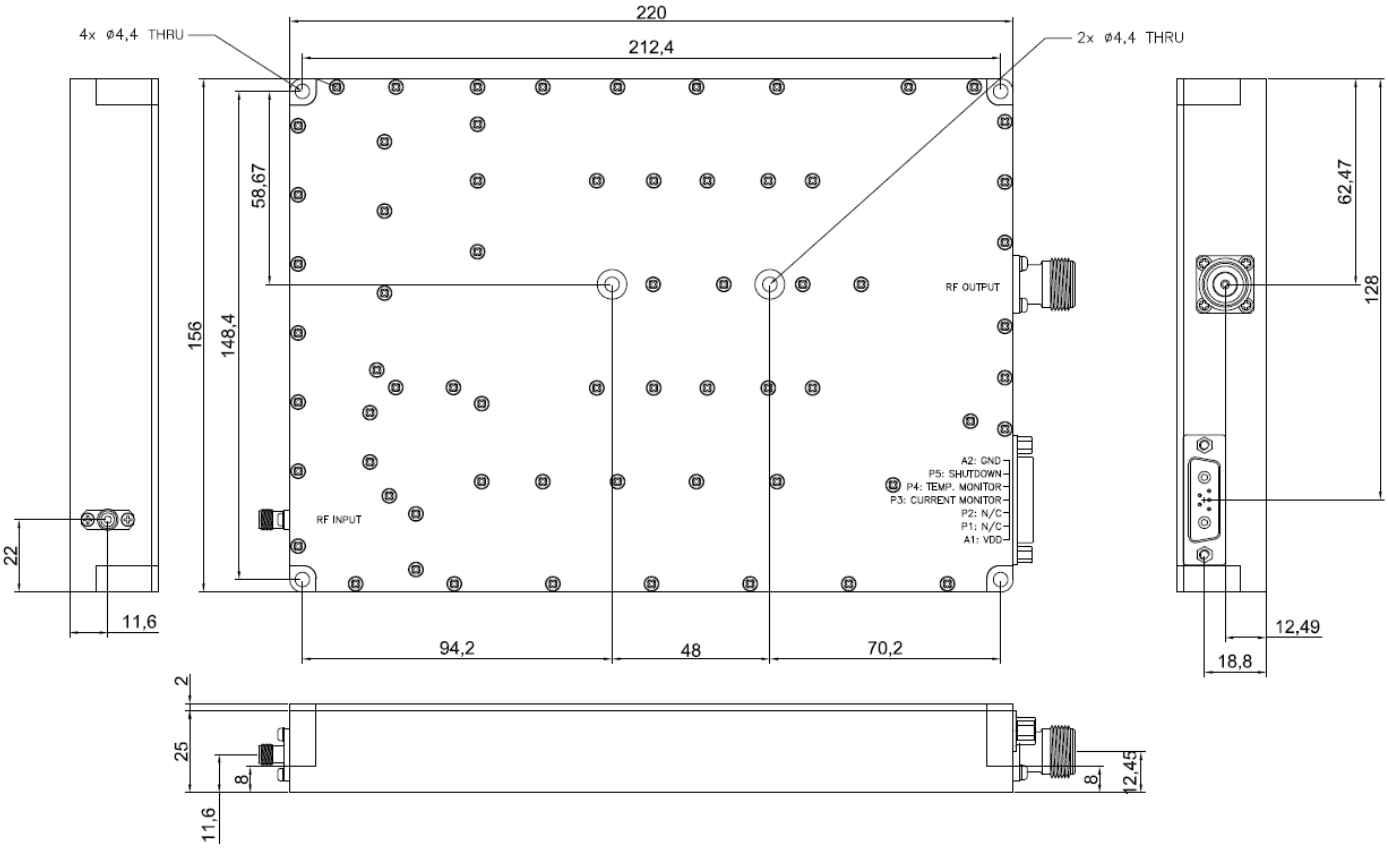
HD Communications Corp. 338 Jericho Tpke. Ste 387
Syosset, NY 11791
Tel: (631) 588-3877 Email: sales@hdcom.com

HD33624
SOLID-STATE HIGH POWER AMPLIFIER

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@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1	VDD	28VDC
A2	GND	Ground

OUTLINE DRAWING



HD Communications Corp. 338 Jericho Tpke. Ste 387
Syosset, NY 11791
Tel: (631) 588-3877 Email: sales@hdcom.com