HD31284
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, and general communication applications
High power advanced linear GaN device design
Instantaneous wide bandwidth
Suitable for all single channel modulation standards
Small form factor & light weight
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25ºC

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 6.0 GHz	
Power Output @ Psat	200 Watt Min / 250 Watt Typ	CW
Power Output @ P1dB	80 Watt Typ	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 Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	44 dBm/Tone, Δ = 1 MHz
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 32 VDC	
Current Consumption	40 Amp Max	At rated Pout
Input Power Protection	+3 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 +65 ºC	
Storage Temperature	-40 to +85 ºC	
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	250 x 200 x 27mm	Excluding connectors
Weight	5.9 Kg.	Module only
RF Connectors In/Out	SMA female / Type-N female	
DC Power / Interface Connector	9-Pin Hybrid D-Sub	9W4
Cooling	External Heatsink	Forced air required

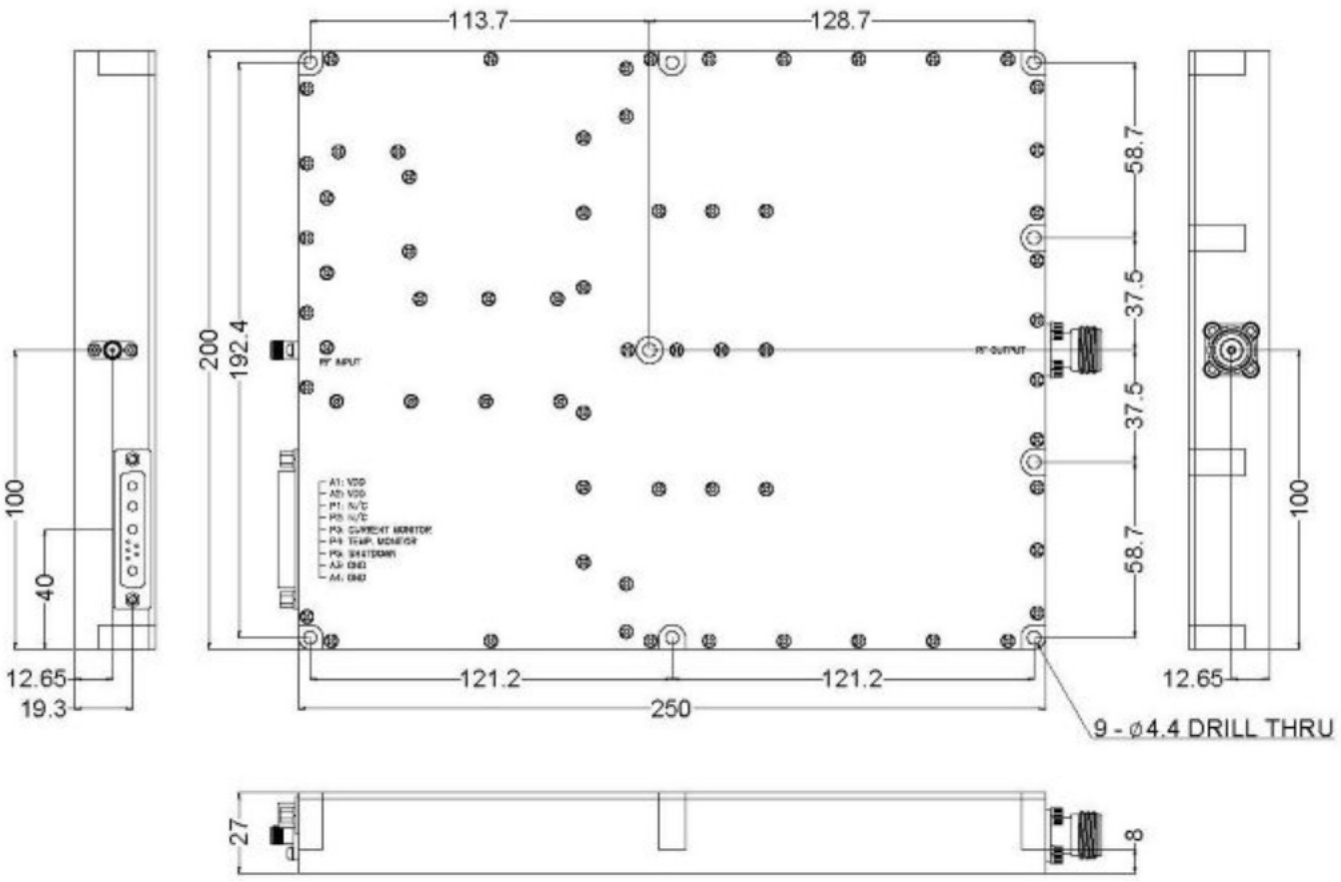
338 Jericho Turnpike, Suite 387, Syosset NY, 11791 (631)-588-3877
www.rfamplifiers.com sales@hdcom.com. www.rfcomp.com
Specifications subject to change without notice. Specifications and drawings may vary with selected options.

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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	N/C
2	N/C	N/C
3	CURRENT SENSOR	I_D@10mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL High or Open; Disable = TTL Low or Short
A1, A2	VDD	32VDC
A3, A4	GND	Ground

OUTLINE DRAWING



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AMP10089
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING
HEATSINK ASSEMBLY



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