HD31233
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
Instantaneous ultra-wide bandwidth
Suitable for all single channel modulations standards
Smallest form factor & lightest weight
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	200 - 600 MHz	
Power Output @ Psat	100 Watt Min	CW
Power Gain	50 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 Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	40 dBm/Tone, Δ = 1MHz
Harmonics	2^{nd}: -30 dBc Typ 3^{rd}: -15 dBc Typ	At rated Pout -13dBc Typ in band
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 VDC Nom	
Current Consumption	9 Amp Max / 7 Amp Typ	At rated Pout
Max Input Power	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Max	<1 minute at rated Pout
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	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	200 x 100 x 27 mm	Excluding connectors
Weight	950 gr.	Max Weight
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	Option-101
2	REV	Option-103
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
6, 7	VDD	28VDC
8, 9	GND	Ground

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

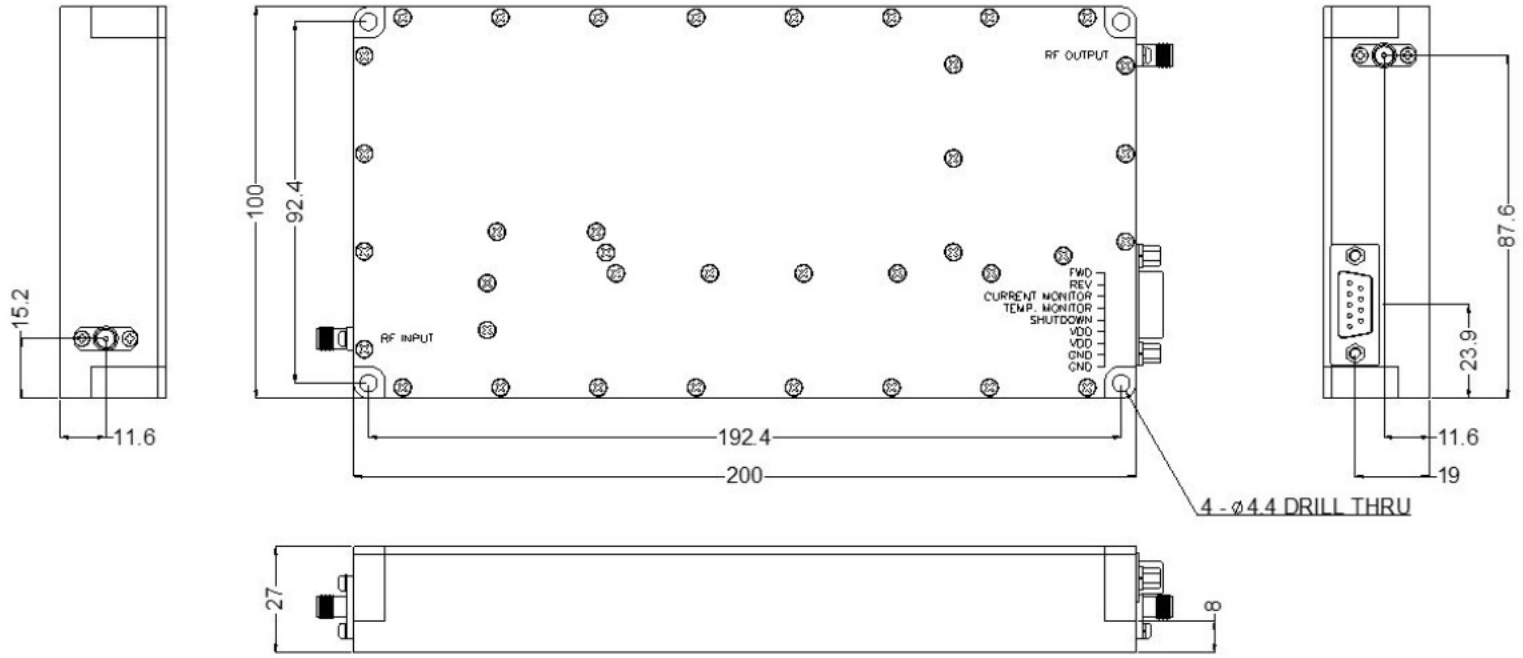
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OUTLINE DRAWING

OPTION ORDERING INFORMATION

101(FWD) : Forward Power Detect

103(VVA) : Variable Voltage Attenuator



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