HD30236
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for all single channel modulation standards
Built-in monitoring and protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter		Specification	Notes
Operating Frequency Range		1 - 1000 MHz	
Power Output Psat		50 Watt Min	CW
Power Output @ P1dB GCP		20 Watt Typ	CW
Power Gain		47 dB Min	
Power Gain Flatness		4.0 dB p-p Max	Constant input power
Input Return Loss		-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)		-30 dBc Typ	37dBm/Tone, Δ = 1MHz
Harmonics	2nd	<-25 dBc Typ	At rated Pout
	3rd	<-15dBc Typ	
Non-Harmonics Spurious		-60 dBc Max	
Operating Voltage		28 VDC ± 0.5 V	
Current Consumption		8 Amp Max / 5 Amp Typ	At rated Pout
Max Input Power		+8 dBm	<10 Sec without damage
Load VSWR Protection		∞ : 1	<1 minute at rated Pout
Turn On / Off Speed		5 µSec Max	

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	162 X 96 X 27 mm	Excluding connectors
Weight	600 gr.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

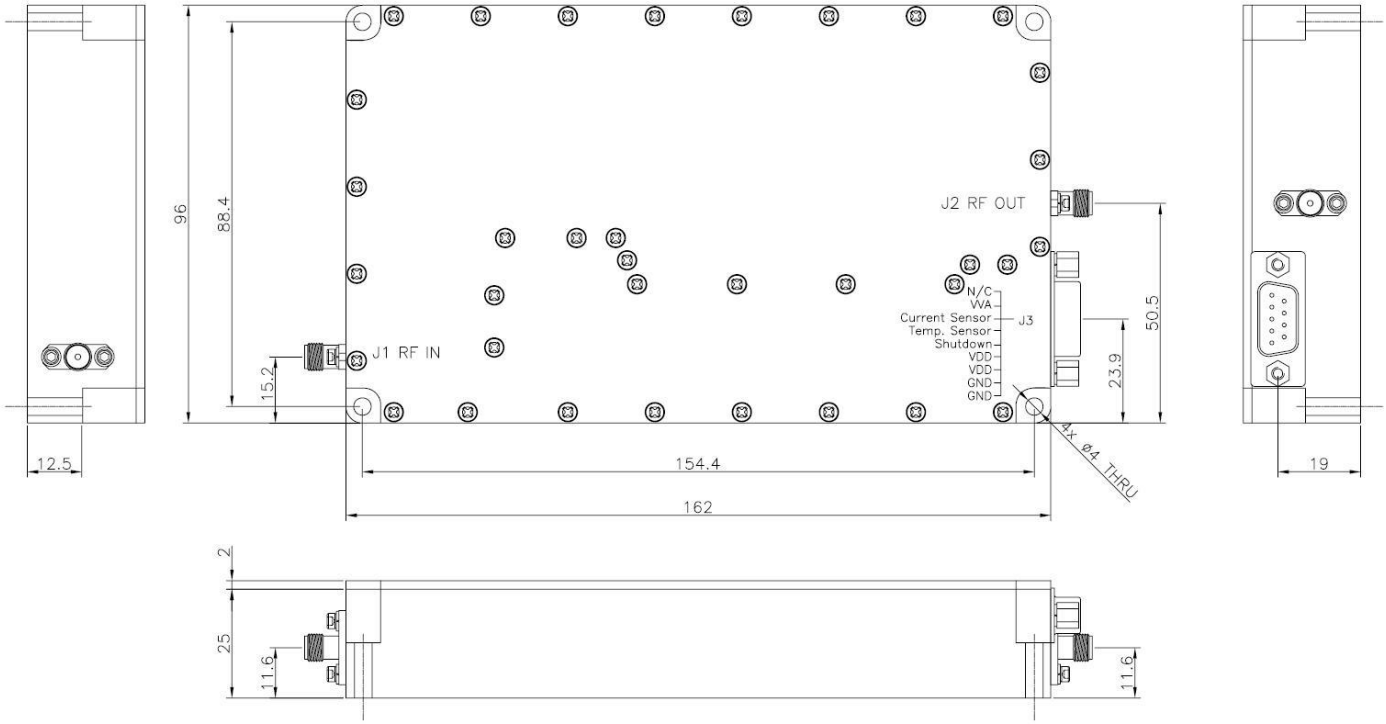
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	VVA	N/C
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN (Open Collector)	Enable = Open or TTL “Low” (0V) - Disable = TTL “High” (>3.2V)
6, 7	VDD	28VDC
8, 9	GND	Ground

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OUTLINE DRAWING



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