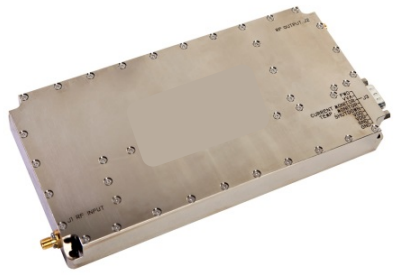
Communications Corp.

HD31758
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS @ 28VDC

Parameter	Specification	Notes
Operating Frequency Range	100 - 400 MHz	
Power Output Psat CW	100 Watt Min	@28VDC
Power Output @ P1dB GCP	50 Watt Min	
Power Gain	50 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	40dBm/Tone, Δ = 1MHz
Harmonics	2nd <-35dBc Typ 3rd <-15dBc Typ	At rated Pout
Non-Harmonics Spurious	-60 dBc Max	
Operating Voltage	24 - 30 VDC Nom	28VDC Nom
Current Consumption	8 Amp Typ	At rated Pout
Max Input Power Protection	+8 dBm	<10 Sec without damage
Load VSWR Protection	∞ : 1 Min	At rated Pout for 1 minute

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-40 to +85 °C	Extended Temp range
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing
Shock and Vibrations	MIL-STD-810F	Design to meet
EMI/EMC sustainability	MIL-STD-461F	Design to meet

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	Option-00 - 162 x 96 x 27 mm Option-01 - 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

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
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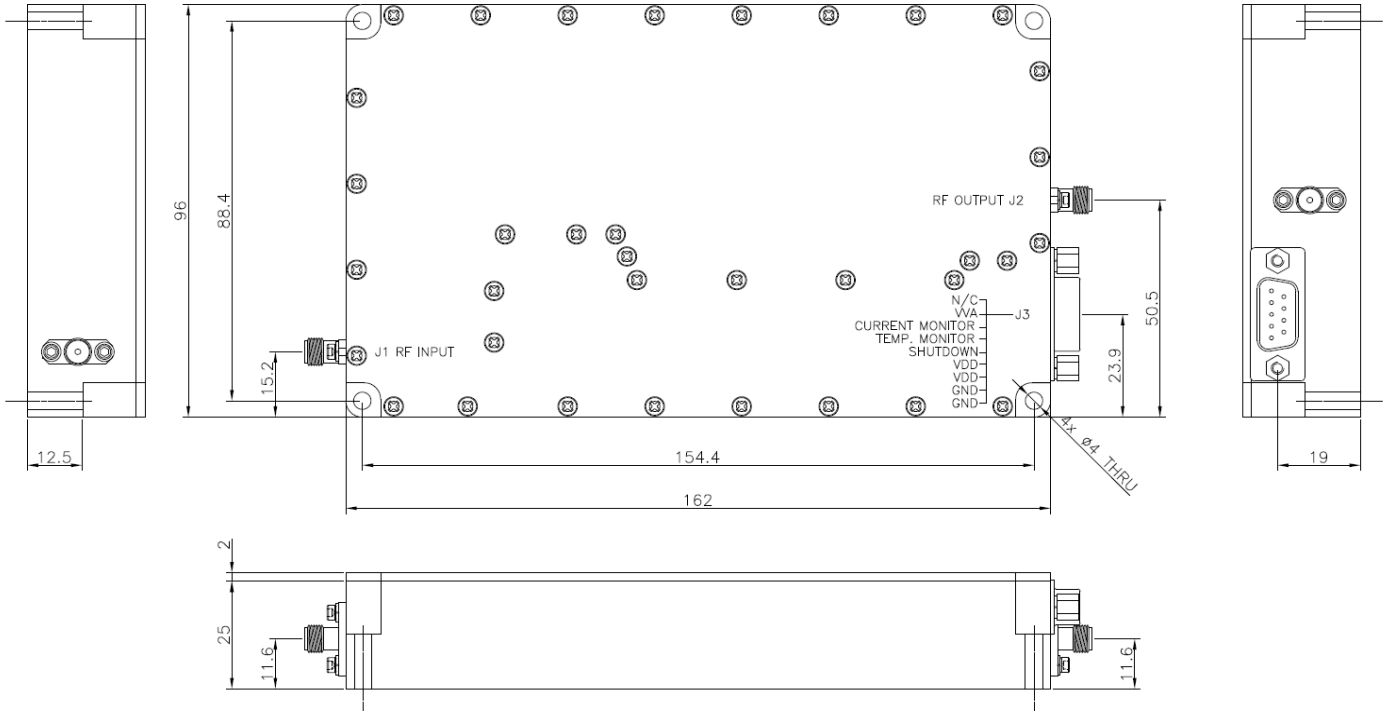
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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Option-101 - Analog Forward Power Indicator
2	VVA	Option-103 - Analog Gain Control
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

OUTLINE DRAWING - STANDARD

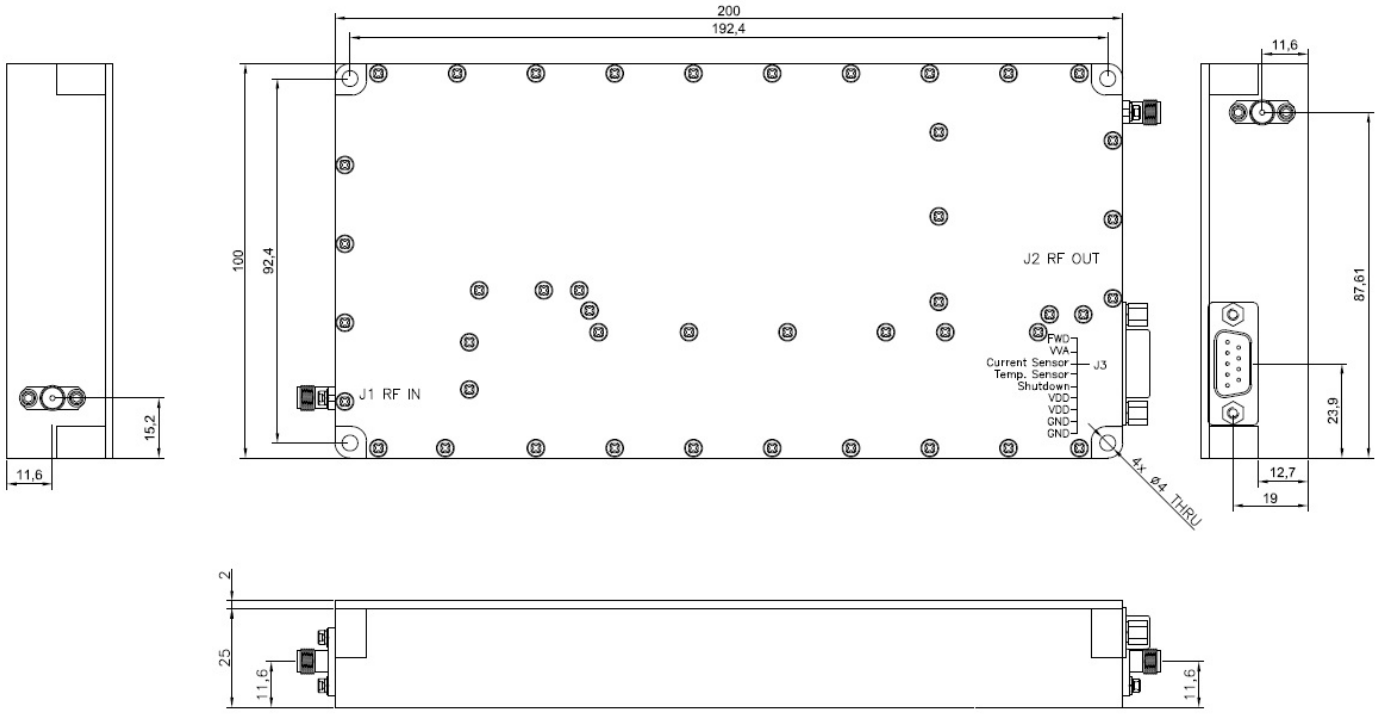


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OUTLINE DRAWING - OPTION 101 & 103



OPTION ORDERING INFORMATION:

OPTION	Function	Description
01	FWD	Forward power detect
03	VVA	Variable Voltage Attenuator

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