HD31053
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2400-2700 MHz	
Power Output	50 Watt Min	CW
Power Gain	47 dB Min	
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	36 dBm/Tone, Δ = 1MHz
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc Min	
Operating Voltage	28 - 30 VDC	
Current Consumption	7 Amp Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	∞ : 1	
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	198 X 92 X 27	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

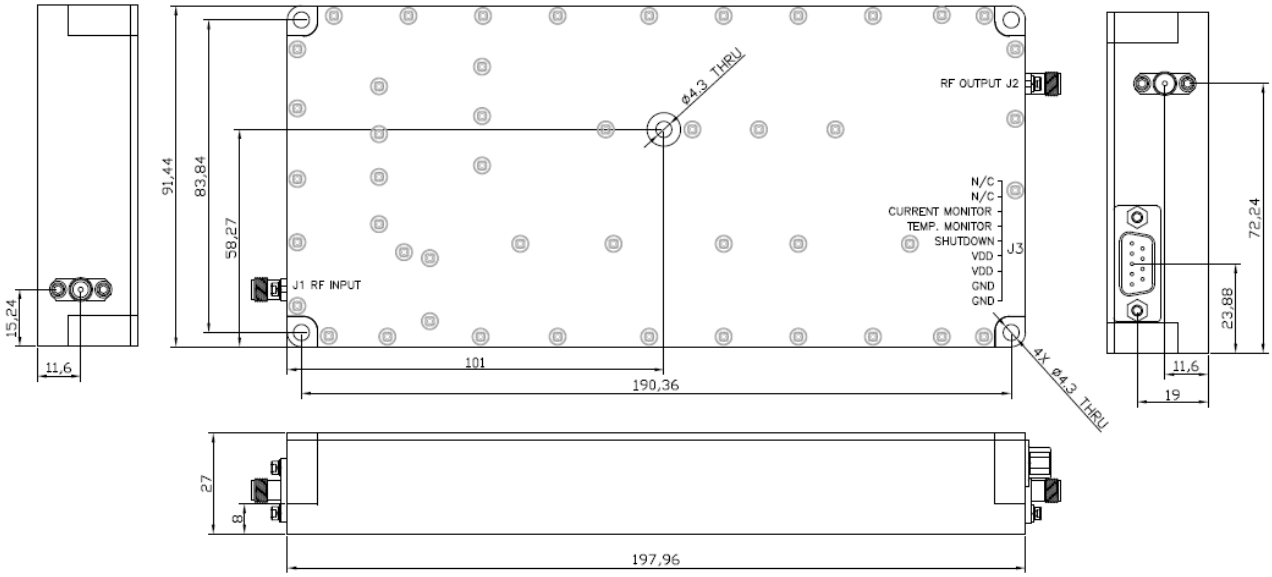
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	VVA	N/C
3	CURRENT SENSOR	20mV/100mA Typ
4	TEMP SENSOR	10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
sales@rfamplifiers.com www.rfamplifiers.com

HD31053
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
sales@rfamplifiers.com www.rfamplifiers.com