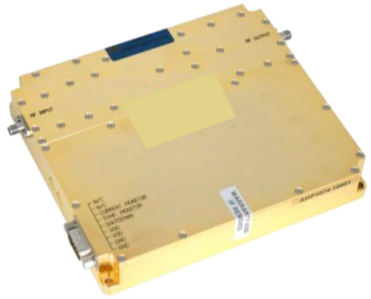
HD31787
SOLID STATE HIGH POWER AMPLIFIER

HD Communications Corp.



FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 18.0 GHz	
Power Output Past	10 Watt Typ	
Power Gain	40 dB Min	
Power Gain Flatness	6 dB p-p Max	
Input Return Loss	10 dB Min	
Harmonics 2^{nd} / 3^{rd}	-20 dBc Typ	-10~-15dBc Typ up to 4GHz
Non Harmonics Spurious	-60 dBc Max	
Operating Voltage	28 VDC Nom	
Current Consumption	2.5 Amp Typ	At rated Pout
Max Input Power Protection	0 dBm Max	<10 Sec without damage
Load VSWR Protection	3 : 1	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	160 x 140 x 27mm	Excluding Connectors
Weight	1.4 Kg.	
RF Connectors In/Out	SMA female	Cover Flange
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

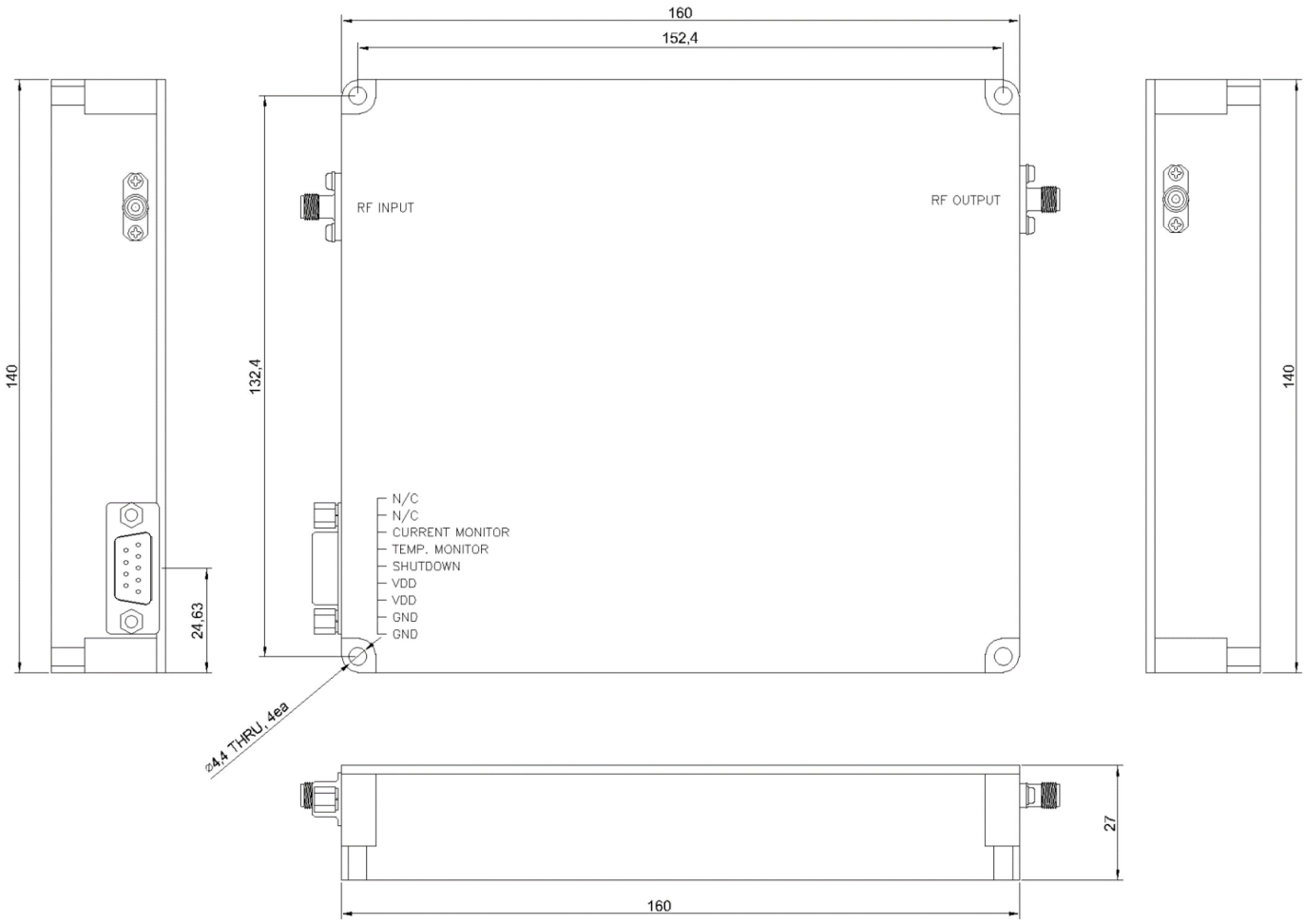
Pin	Function	Description
1		N/A
2		N/A
3	Current Sensor	I_D@50mV/100mA Typ
4	Temp Sensor	V_T@10mV/°C + 500mV Typ
5	Shutdown	TTL
6,7	VDD	28VDC
8,9	GND	Ground

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

Communications Corp.

HD31787
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



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