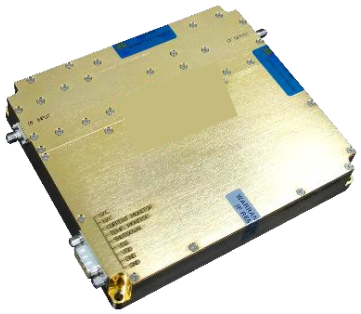
HD33876
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB GaN design
Instantaneous ultra-wide Bandwidth
Full coverage of C, X and Ku Bands
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	4.0 - 18.0 GHz	
Power Output @ Past	10 Watt Min	CW
Power Gain	45 dB Min	
Power Gain Flatness	5 dB p-p Max	±0.3dB over 29-30°C
Input Return Loss	-10 dB Max	
Harmonics 2^{nd} / 3^{rd}	-20 dBc Typ	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	32 VDC Nom	
Current Consumption	3.5 - 4.2 Amp Max	At rated Pout; 4.6Amp @ Psat
Max Input Power	0 dBm Max	<10 Sec without damage
Load VSWR Protection	3 : 1 Max	<1 minute without damage
RF Leakage Suppression	75 - 80 dB Typ	EMI filter feed-thru connectors and shielding gasket

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +60 °C	Thermal shutdown at >+60 °C
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	160 x 140 x 27mm	Excluding connectors
Weight	1.2 Kg.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	Feed-thru connector
Cooling	External Heatsink	Forced air required

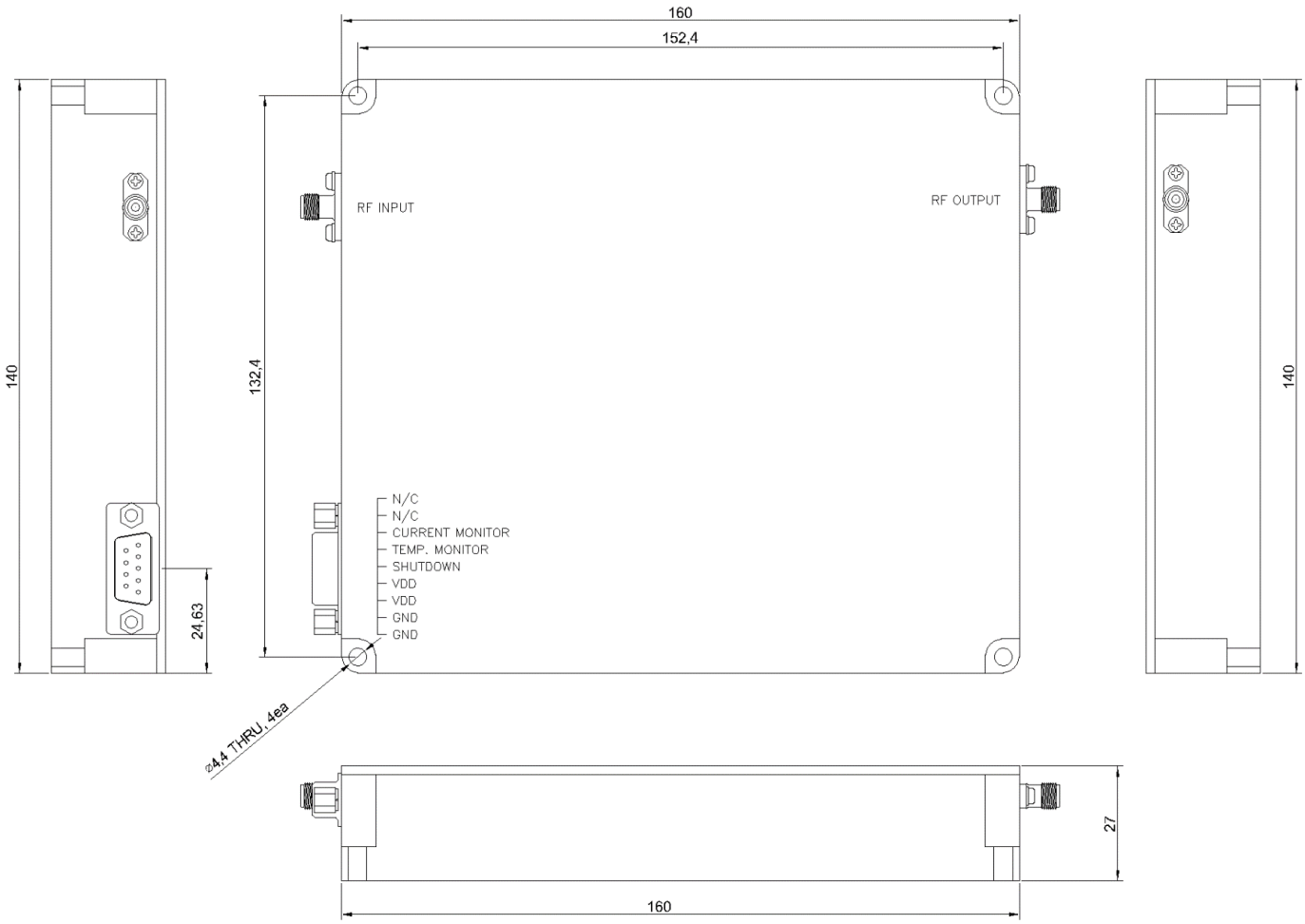
D-SUB CONNECTOR PIN ASSIGNMENT (EMI Filter Connector)

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	32VDC
8,9	GND	Ground

HD Communications Corp. 338 Jericho Tpke. Ste 387
Syosset, NY 11791
Tel: (631) 588-3877 Email: sales@hdcom.com

HD33876
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



HD Communications Corp. 338 Jericho Tpke. Ste 387
Syosset, NY 11791
Tel: (631) 588-3877 Email: sales@hdcom.com