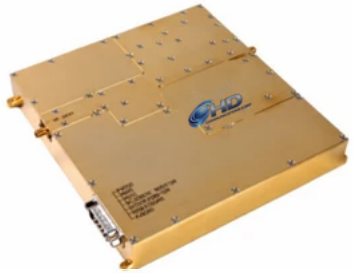
HD31777
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

High Power advanced chip & wire GaN design
Instantaneous wide Bandwidth
Suitable for all single channel modulation standards
Designed for C, X and Ku band applications
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output @ Psat	20 Watt Min	CW
Power Output @ P1dB	>10 Watt Typ	
Small Signal Gain	43 dB Min	
Power Gain Flatness	4.0 dB p-p Max	
Input Return Loss	-10 dB Max	
Harmonics	<-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	10 dB Max	
Operating Voltage	32 VDC Nom	33VDC Max
Current Consumption	8 Amp Max	At rated Pout
Input Power Protection	+3 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Max	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport[1]	

1 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	140 x 140 x 27 mm	Excluding connectors
Weight	3 Kg.	Copper housing
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

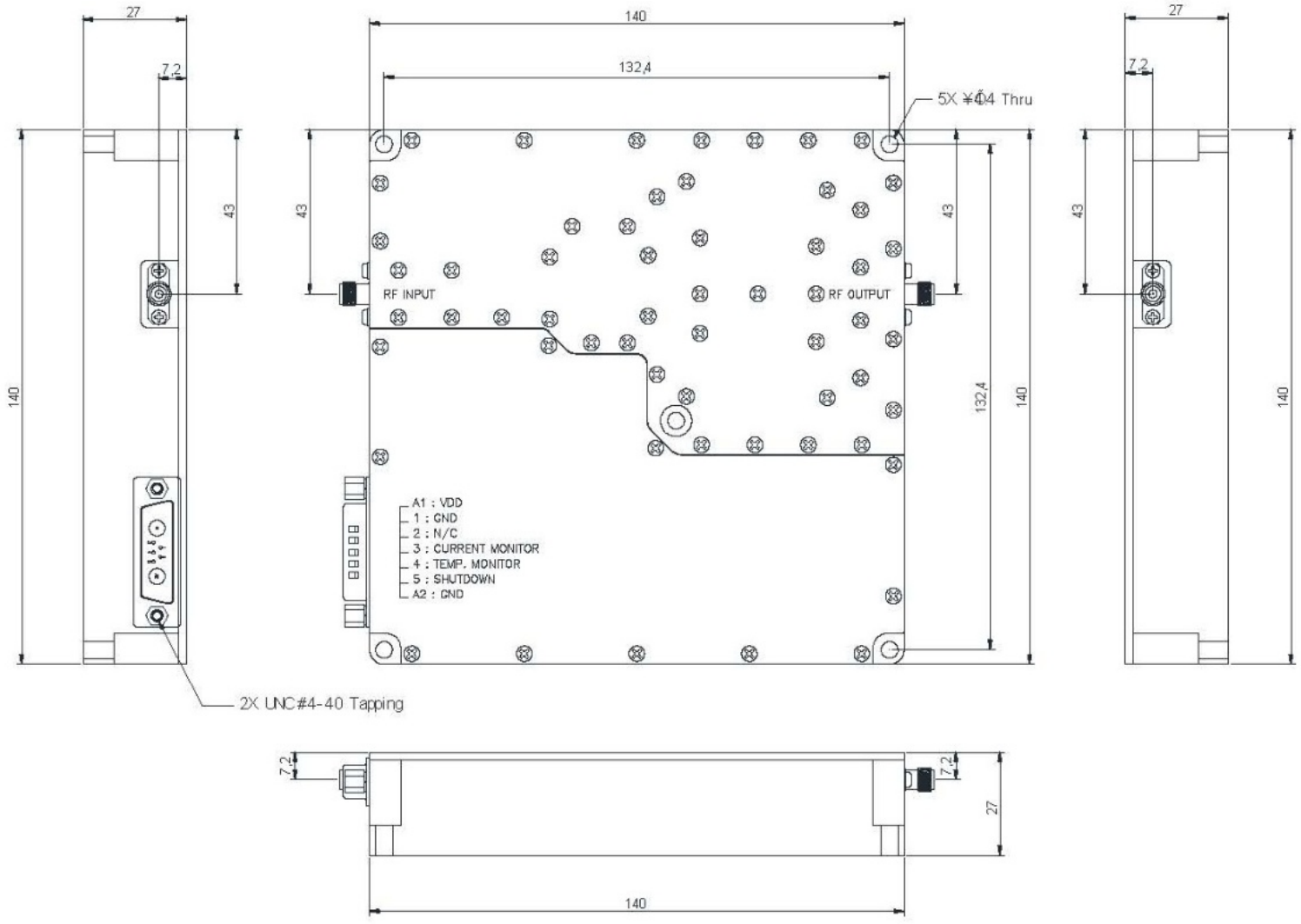
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/A	N/A
2	N/A	N/A
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL High or Open / Disable = TTL Low or Short
A1	VDD	27VDC
A2	GND	Ground

38 Jericho Turnpike, Suite 387, Syosset NY, 11791 (631)-588-3877
www.rfamplifiers.com sales@hdcom.com. www.rfcomp.com
Specifications subject to change without notice. Specifications and drawings may vary with selected options.

HD31777
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



38 Jericho Turnpike, Suite 387, Syosset NY, 11791 (631)-588-3877
www.rfamplifiers.com sales@hdcom.com. www.rfcomp.com

Specifications subject to change without notice. Specifications and drawings may vary with selected options.