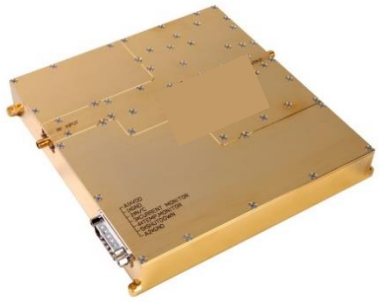
HD31777
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

High Power advanced chip & wire GaN design
Instantaneous wide Bandwidth
Suitable for all single channel modulation standards
Suitable 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 @ Past	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	
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 +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

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

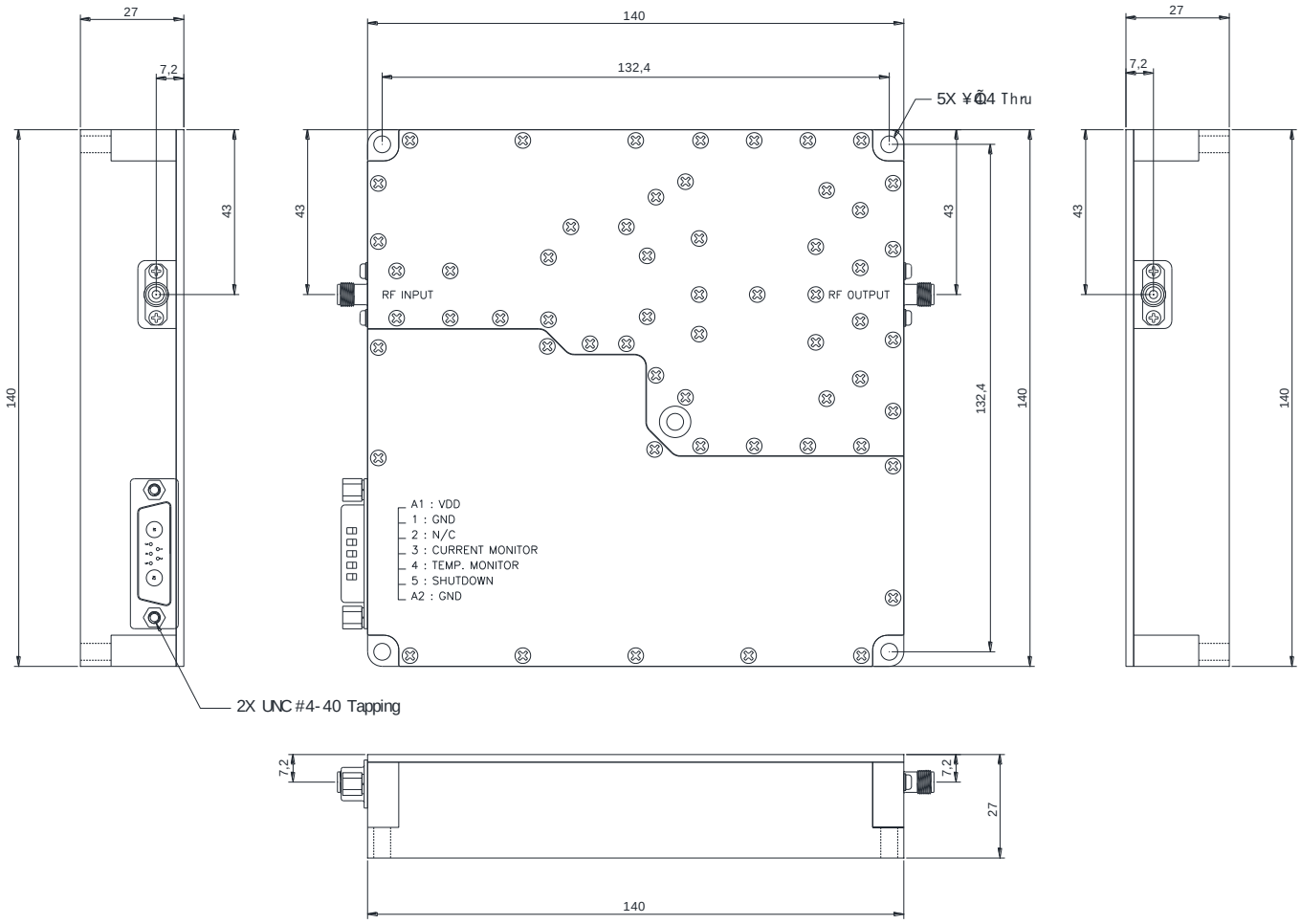
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1		N/A
2		N/A
3	Current Sensor	I_D@20mV/100mA Typ
4	Temp Sensor	V_T@10mV/°C + 500mV Typ
5	Shutdown	TTL
A1	VDD	32VDC
A2	GND	Ground

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OUTLINE DRAWING



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