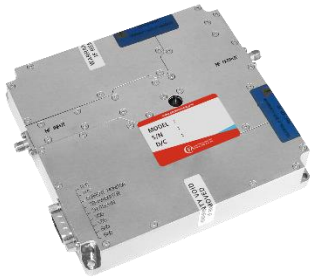
AMP5022-1
SOLID STATE HIGH POWER AMPLIFIER



FEATURES

Class AB Chip & Wire GaN design
Small form factor, light weight
Instantaneous wide Bandwidth
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	9.3 - 9.7GHz	
Power Output Past	50 Watt Min	CW
Power Gain	47 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	10 dB Min	
Harmonics	-25 dBc Max	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	10 dB Max	
Operating Voltage	40 VDC Nom	40VDC for Max Output
Current Consumption	8.5 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

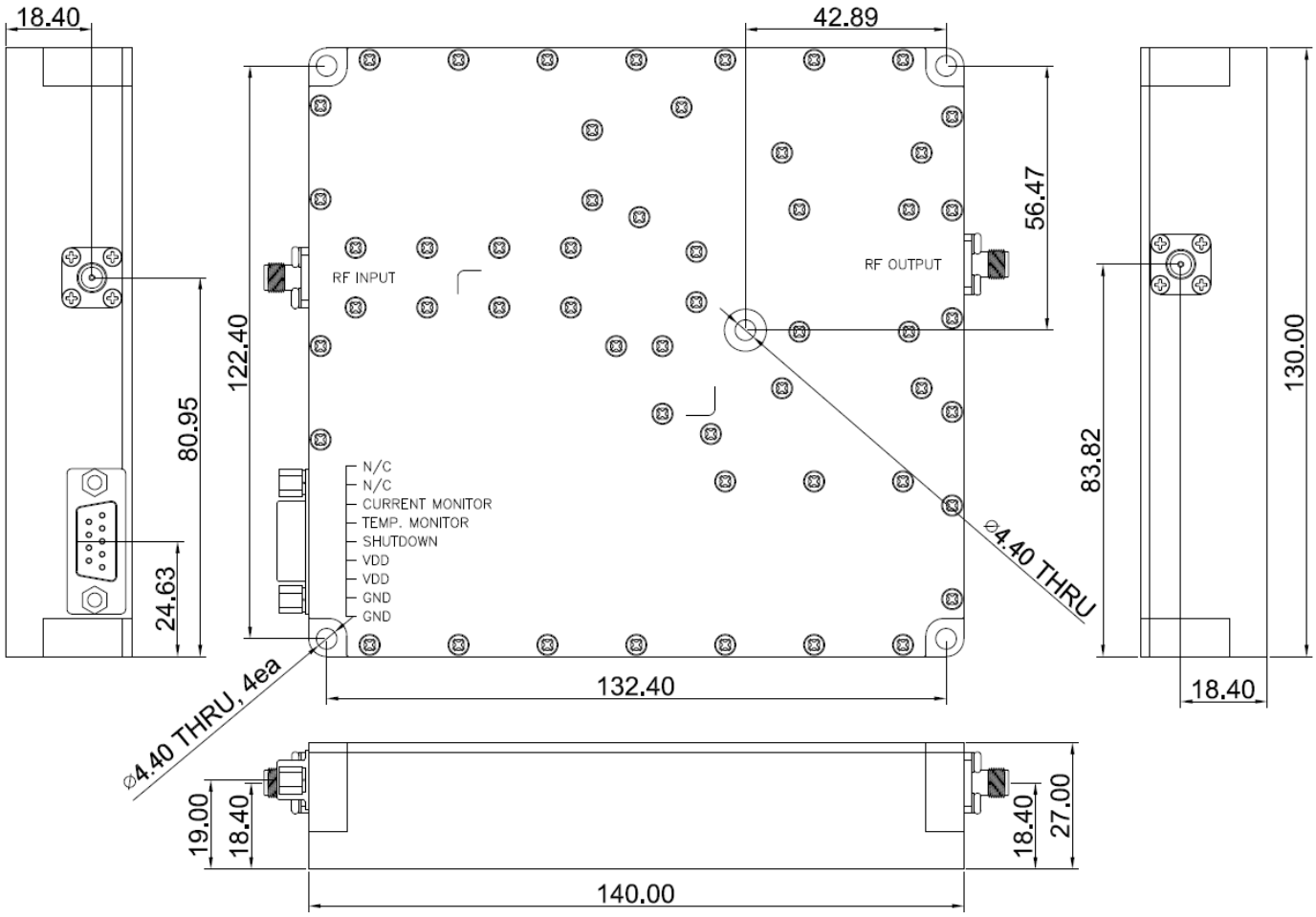
Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	140 x 130 x 27 mm (nominal)	Excluding connectors
Weight	900 gr.	
RF Connectors In/Out	Hi-Freq. 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		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
6,7	VDD	40VDC
8,9	GND	Ground

AMP5022-1
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING-NOMINAL DIMENSIONS