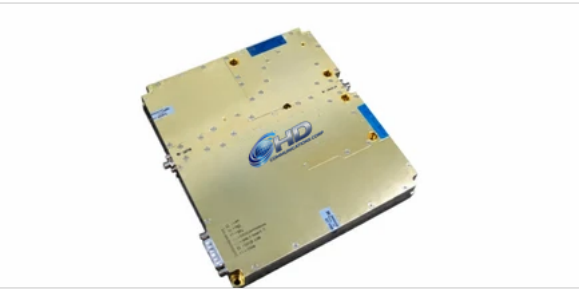
HD32302
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear hybrid GaN design
Instantaneous ultra-wide bandwidth
Suitable for all single channel modulation standards
Suitable for S, X and Ku band applications
Small size and light weight design
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output Psat	40 Watt Min	CW
Power Gain	46 dB Min	
Power Gain Flatness	4.0 dB p-p Max	
Input / Output VSWR	2 : 1 Min	
Harmonics	-15 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	10 dB Max	
Operating Voltage	32 VDC Nom	
Efficiency	10 % Min	At rated Pout
Input Power Protection	+3 dBm Max	<10 Sec without damage
Load VSWR Protection	3 : 1 Max	<1 minute @ rated Pout
Gain Matching	±2.5 dB Typ	Note 1
Phase Matching	±25 Deg Typ	Note 1

Notes: 1. Gain and Phase matching over operating temperature range and input power @ 0dBm ±1dB

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	177.8 x 114.3 x 50.8 mm (7 x 4.5 x1.5 inch)	Excluding connectors
Weight	2.5 kg	
RF Connectors In/Out	SMA female	Cover Flange
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

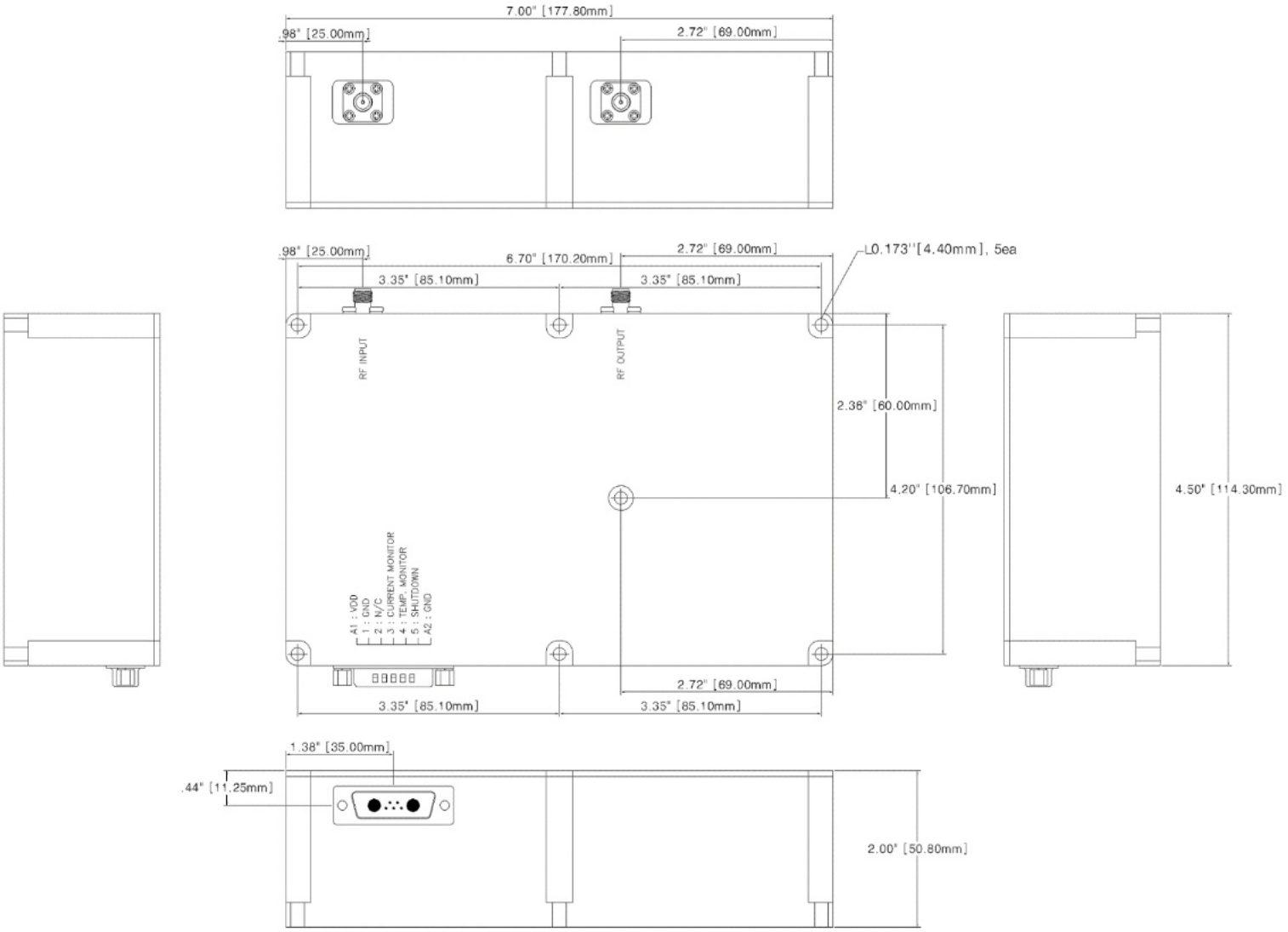
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	GND	Ground
2	N/C	N/A
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "Hi" or open / Disable = TTL "Lo" or short, Within 1uSec
A1	VDD	32VDC
A2	GND	Ground

338 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.

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OUTLINE DRAWING
V0.2 OUTLINE



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