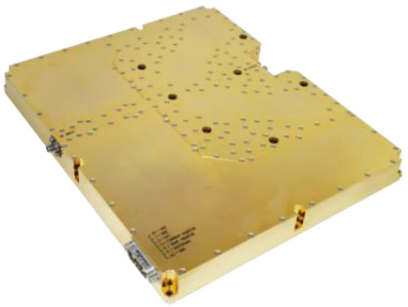
HD Communications Corp.

HD31808
SOLID STATE HIGH POWER AMPLIFIER



FEATURES

High Power Linear GaN design
Instantaneous wide Bandwidth
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output Past	60 Watt Min	CW
Power Gain	48 dB Min	
Power Gain Flatness	5.0 dB p-p Max	
Input Return Loss	10 dB Min	
Harmonics	-20 dBc Max	At rated Pout
Spurious	-55 dBc Max	Non-harmonics
Noise Figure	12 dB Max	
Operating Voltage	32 VDC Nom	
Current Consumption	30 Amp Max	At rated Pout
Max Input Power	+2 dBm Max	Without damage
Load VSWR Protection	3 : 1	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	240 x 285 x 27 mm	Excluding Connectors
Weight	10 Kg.	
RF Connectors In/Out	Hi Freq. SMA female	Cover Flange Glass Bead
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

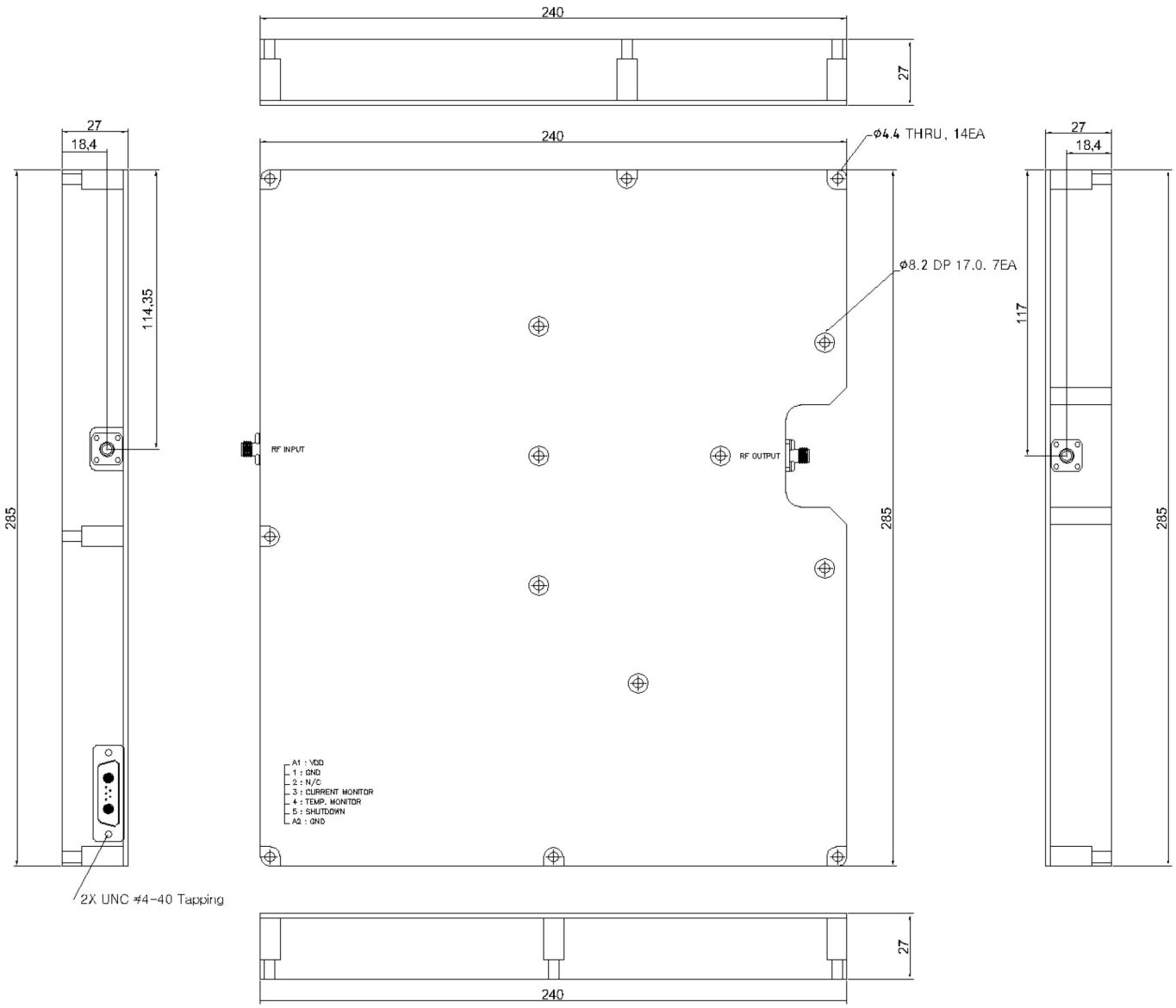
D-SUB CONNECTOR PIN ASSIGNMENT

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

332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfamplifiers.com www.rfcomp.com sales@hdcom.com

HD31808
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



332C Dante Ct. Holbrook, NY 11741 Phone: 631-588-3877 Fax: 631-648-0518
www.rfamplifiers.com www.rfcomp.com sales@hdcom.com