HD31118
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaAs FET hybrid design
Instantaneous wide bandwidth
Designed for military and aerospace applications
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS : 25°C, 9VDC

Parameter	Specification	Notes
Operating Frequency Range	31.0 - 40.0 GHz	
Power Output Psat	5 Watt Min	
Power Output @ P1dB	4 Watt Min	
Power Gain	37 dB Min	
Power Gain Flatness	6.0 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max	Relative to 50 Ohm
Noise Figure	12 dB Max	
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	9 VDC Nom	
Current Consumption	18 Amp Max	At rated Pout
Input Power Protection	0 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	110 x 130 x 27 mm	Excluding connectors
Weight	750 gr.	
RF Connectors In/Out	2.9 mm K Type female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

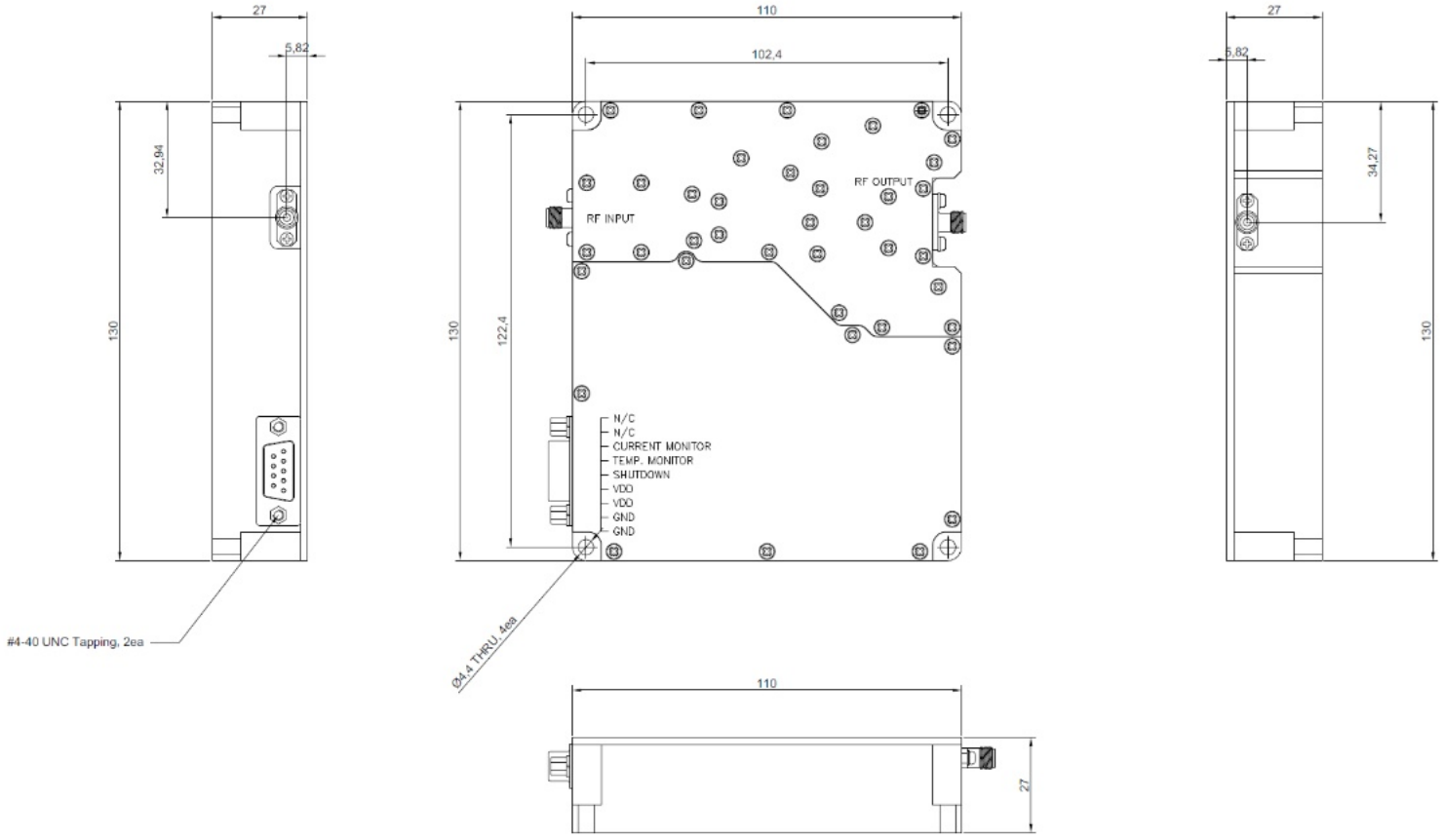
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	Reserved
2	N/C	Reserved
3	CURRENT SENSOR	I_D@20mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	9VDC
8, 9	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.

HD31118
SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING



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.