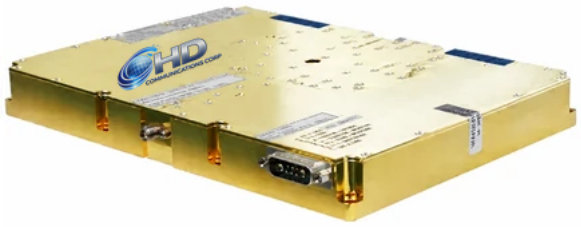
HD31848
SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Designed for EMC-EMI/RFI, Lab, and general comm applications
Suitable for airborne and phase array X-Band pulse operations
Compact Small form factor, light weight, high power density
Class AB linear advanced technology design
Built-in monitoring and protection circuits
High reliability and ruggedness
Instantaneous bandwidth
High dynamic range



ELECTRICAL SPECIFICATIONS : 42VDC, 25°C

Parameter	Specification			Notes
Operating Frequency [1]	8.0 - 10.5 GHz			Any 1000MHz BW
Output Power @ Pulse	500 Watt Min			Peak Pulse
Peak Power Gain [2]	57 dB Min			
Input Pulse Characteristics	**Pulse Width**	**Duty Cycle**	**PRF**	
	0.1 - 100 µS	10 % Max	100 KHz	Nominal values
Pulse Rise / Fall Time	<50 nS			
Pulse Droop	0.8 dB Max			@ 100 µS
Input Return Loss	10 dB Min			
Harmonics	-30 dBc Nom			
Spurious	-60 dBc Max			Non-harmonics or Gaussian
Operating Voltage	42 VDC Nom			
Current Consumption	4.8 Amp Avg. Typ			@ 10% duty cycle
Load VSWR	∞ : 1			External output Isolator required

1 Any 1000MHz Bandwidth, specify @ time of order.
2 To combine 2 or more modules, specify lower gain, phase and gain matching when ordering.

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport[2]	

3 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	250 x 175 x 27 mm	Excluding connectors
Weight	4 Kg.	
RF Connectors In/Out	SMA female / Type N female	WR-90 optional
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

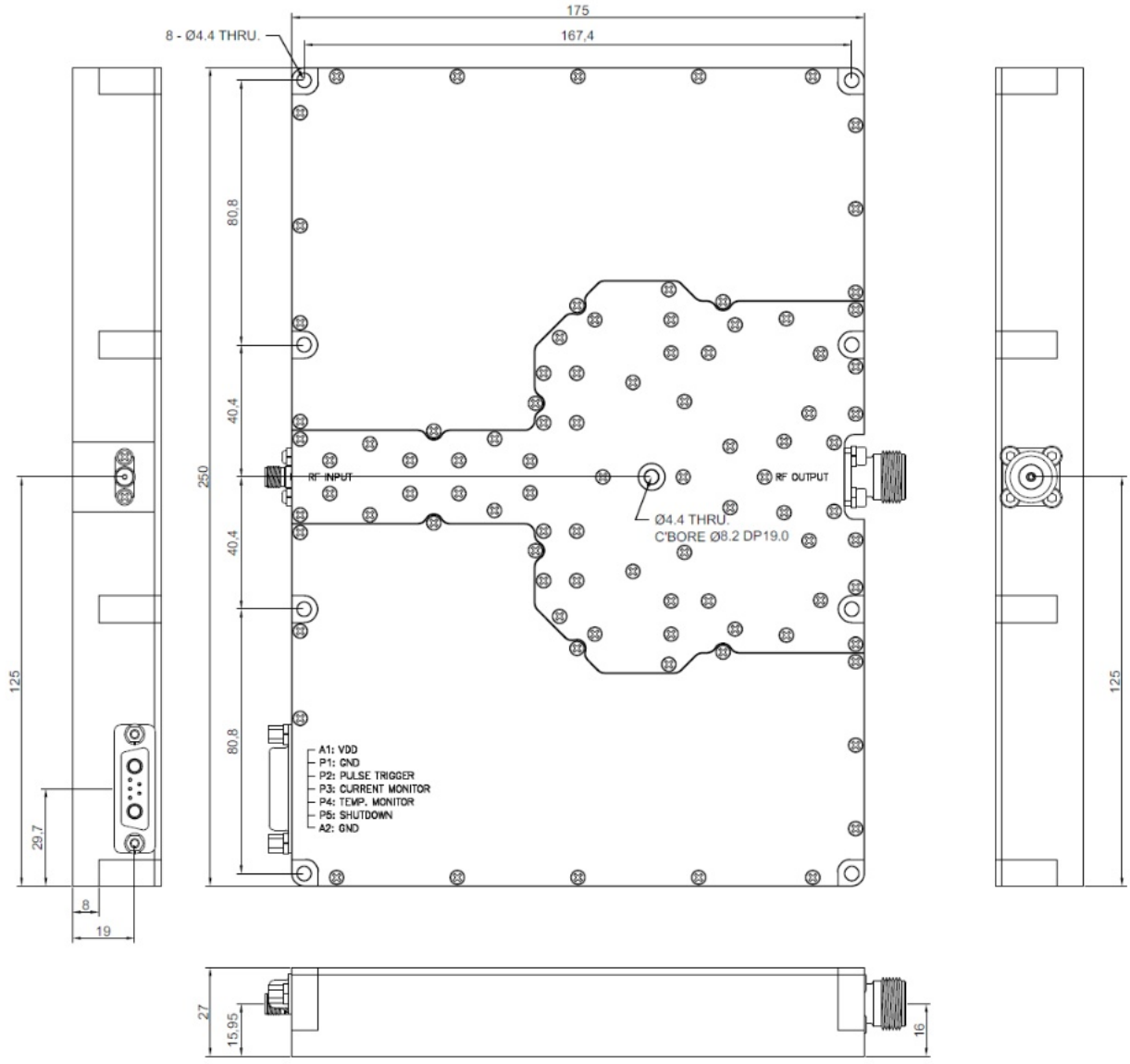
338 Jericho Turnpike, Suite 387, Syosset NY, 11791 (631)-588-3877
www.rfamplifiers.com sales@hdcom.com. www.rfcomp.com
Specifications subject to change without notice. Specifications and drawings may vary with selected options.

HD31848
SOLID STATE HIGH POWER PULSE AMPLIFIER

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	GND	Ground
2	PULSE GATING CONTROL	TTL "Hi" = Disable, TTL "Lo" = Enable
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL "Hi" = Disable, TTL "Lo" or Open = Enable
A1	VDD	42VDC
A2	GND	Ground

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.

OUTLINE DRAWING
GATING TIMING DIAGRAM

