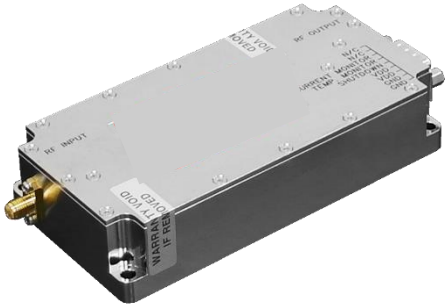
HD30780
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
Instantaneous ultra-wide bandwidth
Suitable for all single channel modulation standards
Small form factor and light weight
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25 °C

Parameter		Specification	Notes
Operating Frequency Range		0.25 - 1000 MHz	
Output Power @ Psat		10 Watt Min	CW
Power Gain		40 dB Min	
Power Gain Flatness		4 dB p-p Max	Constant input power
Input Return Loss		-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)		<-30 dBc Typ	30dBm/Tone, Δ = 1MHz
Harmonics @ Rated Pout	2nd	-14 dBc Typ	Below 500 MHz
	3rd	-25 dBc Typ	
Spurious		-60dBc Max	Non-harmonics
Noise Figure		<10 dB Typ	
Operating Voltage		28 - 30 VDC	
Current Consumption		2 Amp Max	At rated Pout
Max Input Power		+8 dBm	<10 Sec without damage
Load VSWR Protection		∞ : 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-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	125 x 63 x 27 mm	Excluding connectors
Weight	350 gr.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

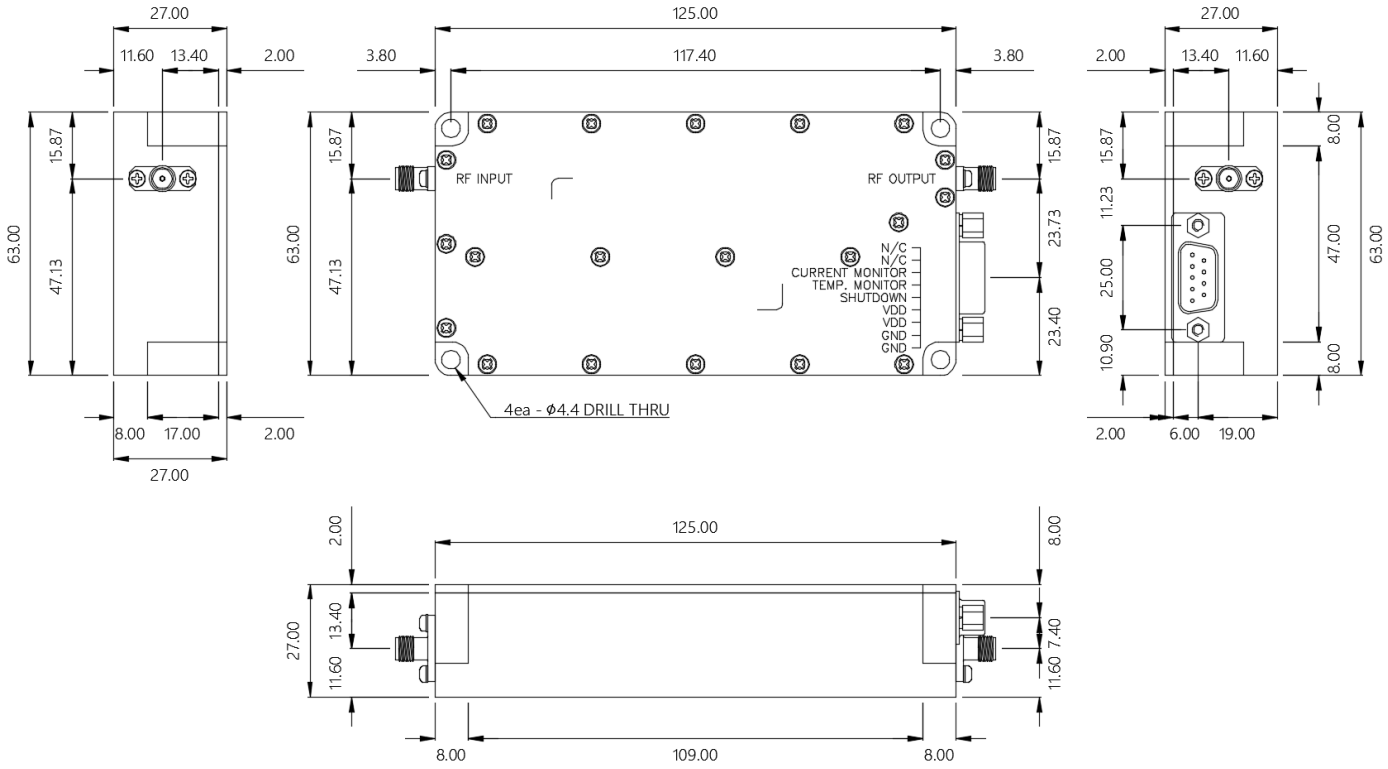
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/A
2	VVA	N/C
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

HD Communications Corp. 338 Jericho Tpke. Ste 387
Syosset, NY 11791
Tel: (631) 588-3877 Email: sales@hdcom.com

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OUTLINE DRAWING



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Syosset, NY 11791
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