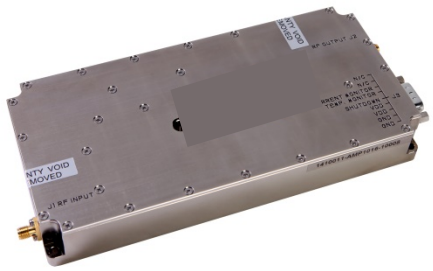
HD Communications Corp.

HD31280
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for CW, pulse and all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 6.0 GHz	
Power Output	30 Watt Min / 40 Watt Typ	CW
Power Gain	45 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	35 dBm/Tone, Δ = 1 MHz
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc MAX	Non-Harmonics
Operating Voltage	28 - 32 VDC	30VDC Nom
Current Consumption	6 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<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-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	161 x 75 x 27 mm	Excluding Connectors
Weight	0.9 Kg.	Max Weight
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

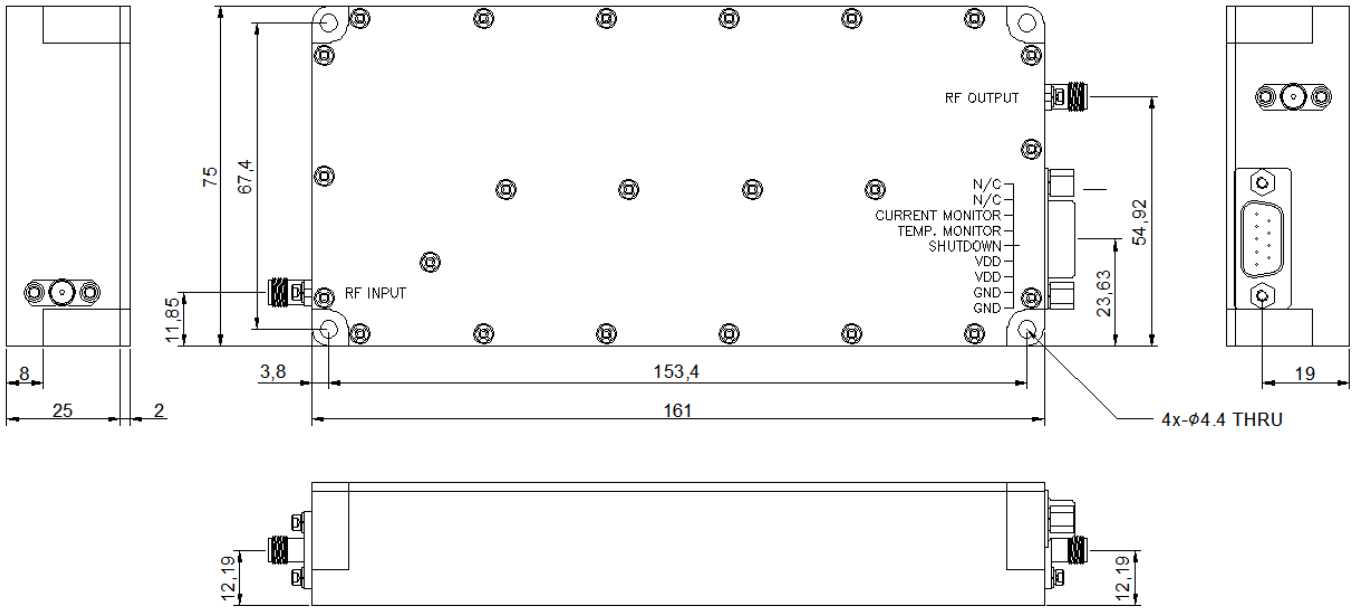
Pin	Function	Description
1	FWD	OPTION 101 - Forward power detect
2	VVA	OPTION 103 - Variable Voltage Attenuator
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	30VDC
8, 9	GND	Ground

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OUTLINE DRAWING



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