HD31063
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN linear design
C-Band COFDM application
Built-in Isolator, current and temperature protection circuits
Directional coupler for FWD and REV ports
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	3.8 - 4.2 GHz	
Power Output	10 Watt Min	Single COFDM signal
Small Signal Gain	40 dB Min / 43 dB Typ	
Power Gain Flatness	1.0 dB p-p Max	
Coupled Output Ports: FWD / REV	-30dBc Typ	
Input / Output Return Loss	14 dB Min	Relative to 50 Ohm
Non Harmonics Spurious	-60 dBc Max	
Operating Voltage	32 VDC Nom	
Current Consumption	6 Amp Max	At rated output
Load VSWR Protection	∞ : 1 Min	Output Isolator

ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Note
Dimensions Maximum.	208 X 92 X 27 mm	Excluding Connectors
Weight	TBD	
RF Connectors In / Out	SMA female / SMA female	Optional output Type N-F
Coupled Output Ports FWD / REV	SMA-F	
DC Power / Monitor	7-Pin Hybrid D- Sub	FU7W2 or FL7W2 or equiv.
Cooling	External Heatsink	Forced air required

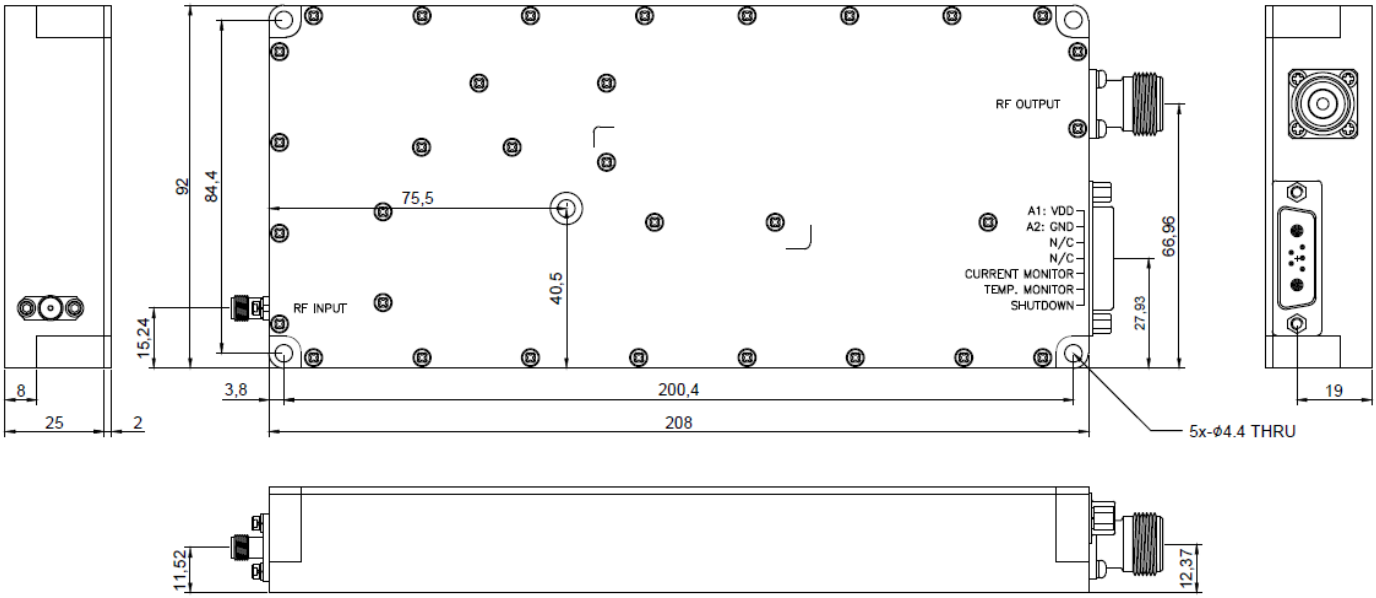
D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Optional - Forward Power Indication
2	REV	Optional - Reverse Power Indication
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUDOWN	TTL
A1	VDD	32VDC
A2	GND	Ground

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OUTLINE DRAWING



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