HD31791
SOLID STATE HIGH POWER AMPLIFIER

Communications Corp.



FEATURES

Class AB GaN design
Instantaneous ultra wide Bandwidth
Built-in protection circuits
Suitable for all single channel modulation standards
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1 - 20 GHz	
Power Output Psat	2Watt Min / 4 Watt Typ	3W Typ @ 18-20GHz
Power Output P1dB GCP	1 Watt Typ	CW
Small Signal Gain	33 dB Min	
Power Gain Flatness	4 dB p-p Max	
Input Return Loss	>10 dB Typ	
Harmonics	-20 dBc Max	At rated Pout -10dBc Typ @ 1-2GHz
Noise Figure	10 dB Max	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	22 - 24VDC Nom	
Current Consumption	1.8 Amp Max / <1.5 Amp Typ	At rated Pout
Max Input Power	+5 dBm Max	0dBm nominal input level
Load VSWR	5 : 1 Max	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +70 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	90 x 85 x 22mm	Excluding Connectors
Weight	600 gr.	
RF Connectors In/Out	SMA female	Cover Flange
DC Power	Feed Thru	
Cooling	External Heatsink	Forced air required

PIN ASSIGNMENT

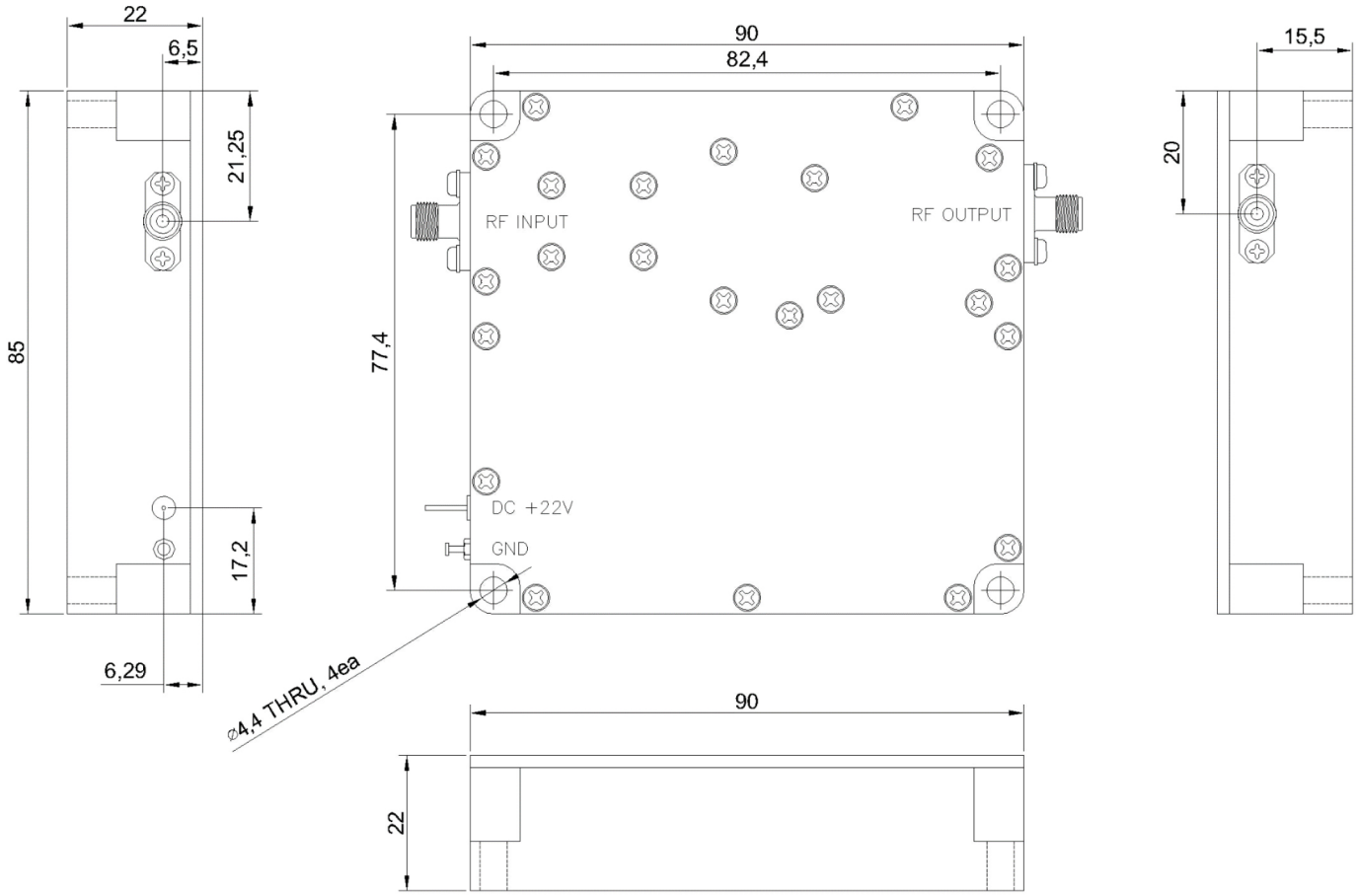
Pin	Function	Description
1	DC Voltage	+22 - 24VDC
2	GND	GND

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OUTLINE DRAWING



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