

Power Amplifier

WR-10/88-98GHz/18dB Gain/27dBm Psat

Model: TMPA-088098-1827-10

TMPA-088098-1827-10 is a power amplifier with a typical small signal gain of 18 dB and a nominal Psat of 27 dBm across the frequency range of 88 to 98 GHz. The DC power requirement for the amplifier is +18 VDC. The input and output port configuration offers an inline structure with WR-10 waveguides and UG-387/U anticocking flanges.

Features:

- Frequency range: 88-98GHz
- Gain: 18dB Typ
- Output Power Psat: 27dBm Typ
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	88		98	GHz
Small Signal Gain		18		dB
Output Psat		27		dBm
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage		18		V DC

Mechanical Specifications:

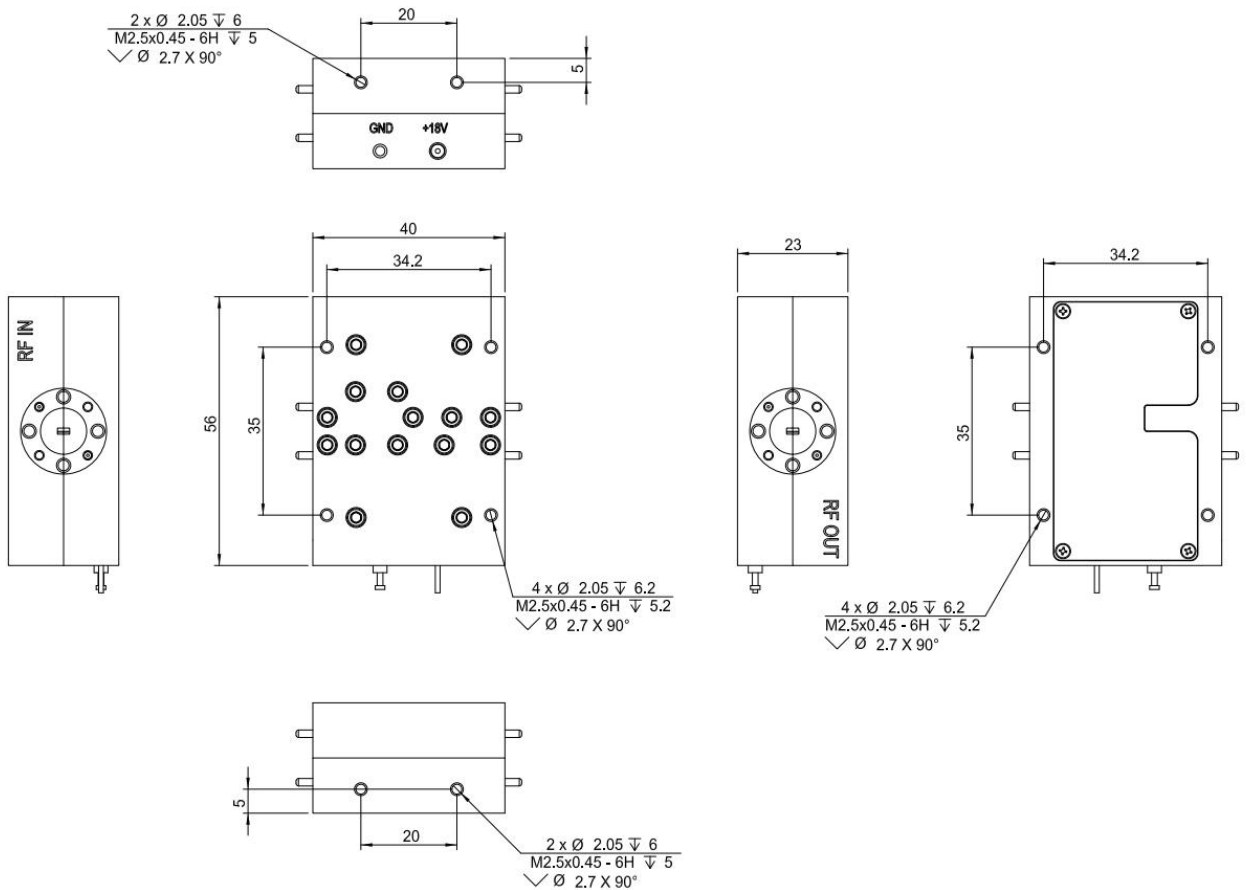
Parameter	Value	Units
Input /Output Connector	WR-10/UG-387/U	
DC Bias	Solder Pin	
Size	40*56*23(Without heatsink) 40*87*67(With heatsink)	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+20 V
RF Input Power	20dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

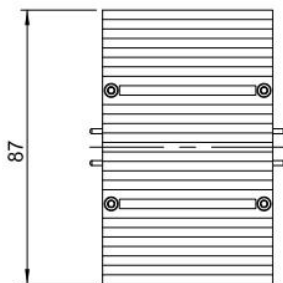
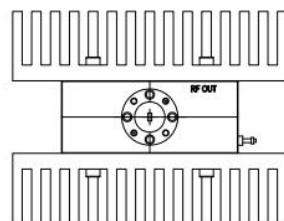
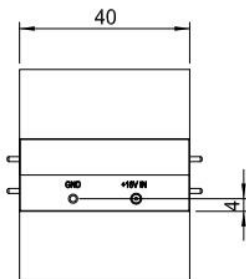
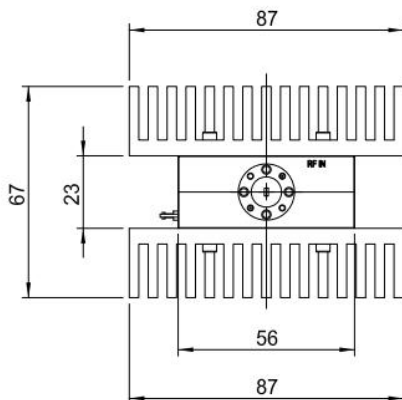
Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMPA-088098-1827-10	Power Amplifier, 88-98GHz, Gain: 18dB Type, Psat: 27dBm Type, +18V DC,WR-10, With heasink	Rev.1.0