

Power Amplifier

WR-10/90-98GHz/19dB Gain/28dBm Psat

Model: TMPA-090098-1928-10

TMPA-090098-1928-10 is a power amplifier with a typical small signal gain of 19 dB and a nominal Psat of 28 dBm across the frequency range of 90 to 98 GHz. The DC power requirement for the amplifier is +18 VDC/230 mA. The input and output port configuration offers an inline structure with WR-10 waveguides and UG-387/U-M anticocking flanges.

Features:

- Frequency range: 90-98GHz
- Gain: 19dB Typ
- Output Power Psat: 28dBm Typ
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	90		98	GHz
Small Signal Gain		19		dB
Output Psat		28		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		18		V DC
DC Supply Current		230		mA

Mechanical Specifications:

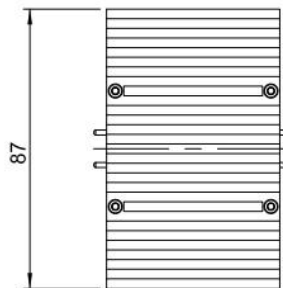
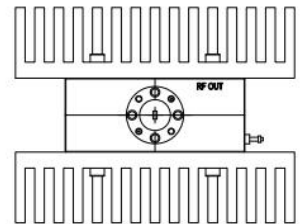
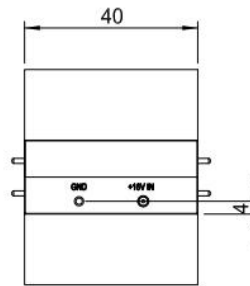
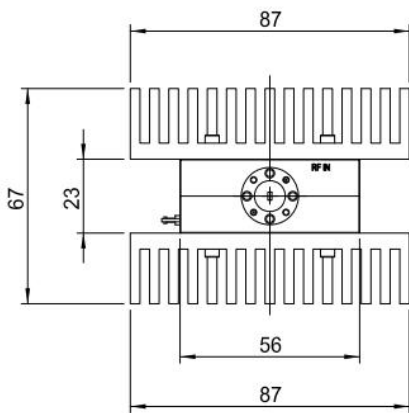
Parameter	Value	Units
Input /Output Connector	WR-10/UG-387/U	
DC Bias	Solder Pin	
Size	40*87*67 (With heatsink)	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+19 V
RF Input Power	+20 dBm
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.

Environmental Conditions:

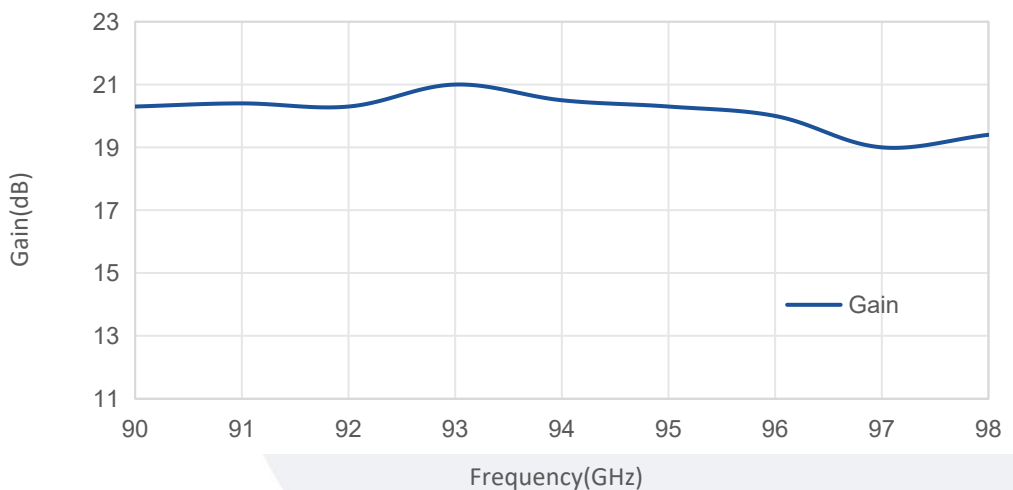
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMPA-090098-1928-10	Power Amplifier, 90-98GHz, Gain: 19dB Type, Psat: 28dBm Type, +18V DC,WR-10, Without heatsink	Rev.1.1
TMPA-090098-1928-10-HS	Power Amplifier, 90-98GHz, Gain: 19dB Type, Psat: 28dBm Type, +18V DC,WR-10, With heatsink	Rev.1.1

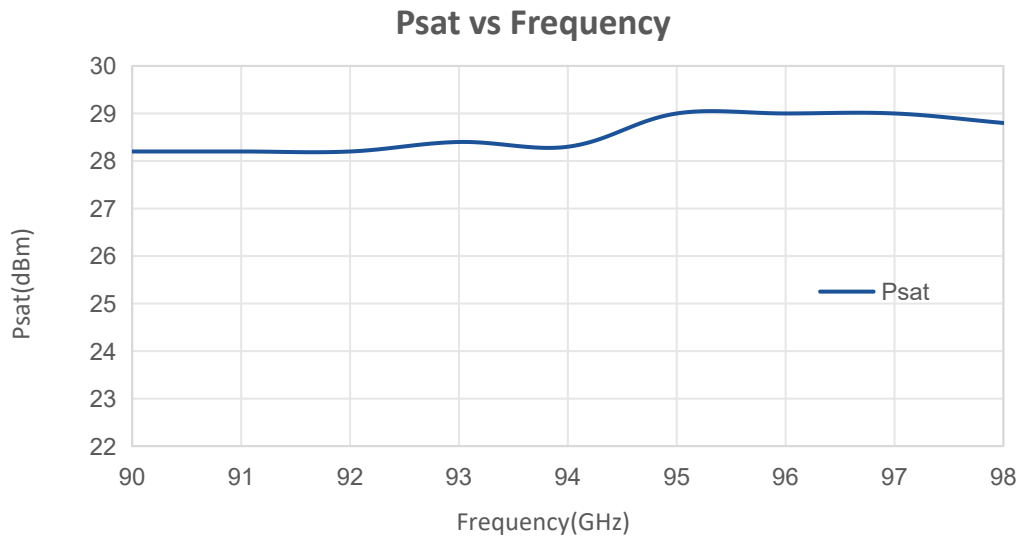
Typical Performance Data:

Gain vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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