

Power Amplifier

WR-10/85-100GHz/38dB Gain/24dBm Psat

Model: TMPA-085100-3826-10-E

TMPA-085100-3826-10-E is a power amplifier with a typical gain of 38 dB and a nominal Psat of 24 dBm across the frequency range of 85 to 100 GHz. The DC power requirement for the amplifier is +8 VDC/1.2 A. The input and output port configuration offers an inline structure with WR-10 waveguides and UG-387/U-M anticocking flanges.

Features:

- Frequency range: 85-100GHz
- Gain: 38dB Typ
- Output Power Psat: 24dBm Typ
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	85		100	GHz
Gain		38		dB
Gain Flatness		±3		dB
Output Psat		24		dBm
DC Voltage		8		V DC
DC Supply Current		1.2		A

Mechanical Specifications:

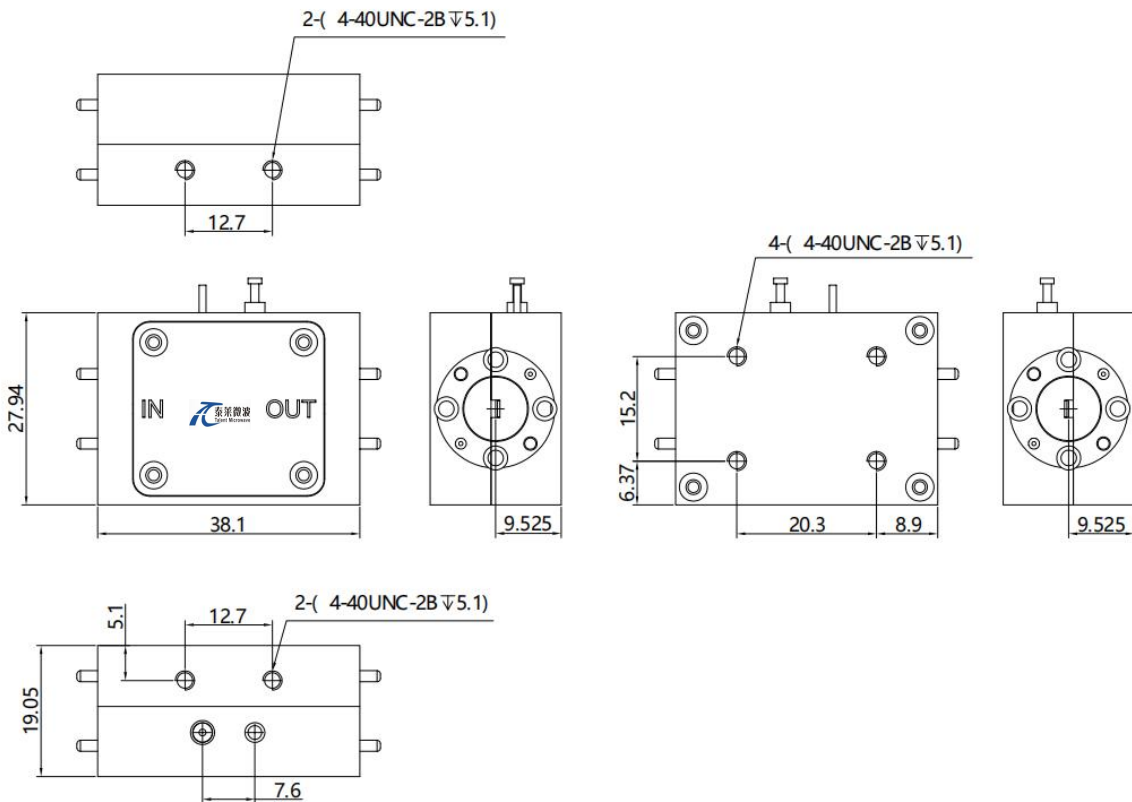
Parameter	Value	Units
Input /Output Connector	WR-10/UG-387/U	
DC Bias	Solder Pin	
Size	38.1*27.94*19.05	mm

Absolute Maximum Ratings:

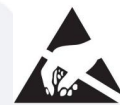
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	0 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



*****Heat Sink Required During Operation**



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

Environmental Conditions:

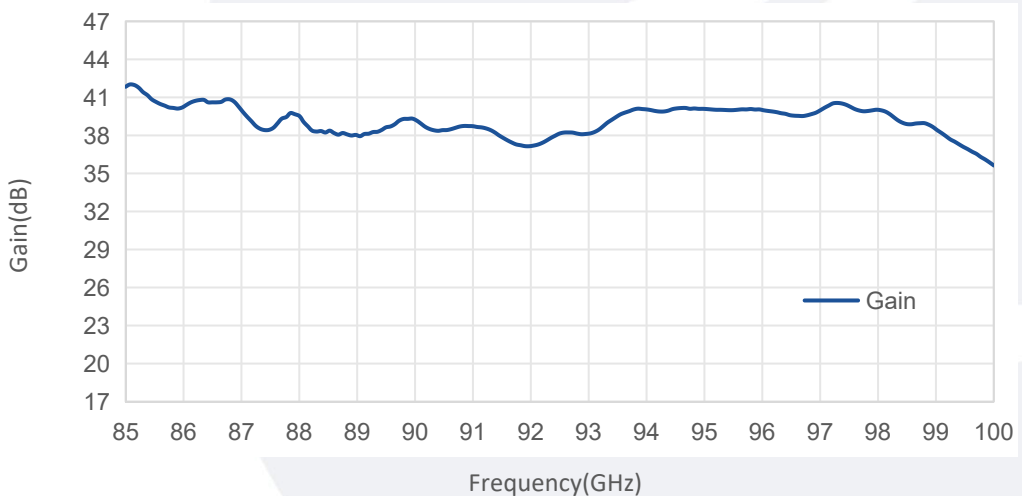
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMPA-085100-3826-10-E	Power Amplifier, 85-100GHz, Gain: 38dB Type, Psat: 24dBm Type, +8V DC,WR-10, Without heatsink	Rev.1.1
TMPA-085100-3826-10-E-HS	Power Amplifier, 85-100GHz, Gain: 38dB Type, Psat: 24dBm Type, +8V DC,WR-10, With heatsink	Rev.1.1

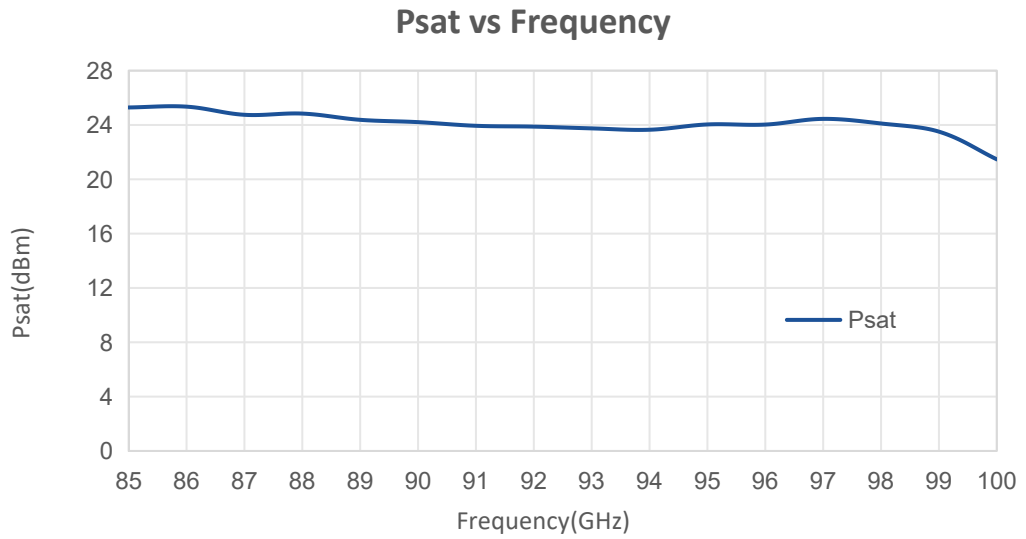
Typical Performance Data:

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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