泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Power Amplifier

WR-12/55-90GHz/20dB Gain/19dBm Psat

Model: TMPA-055090-2019-12

TMPA-055090-2019-12 is a power amplifier with a typical small signal gain of 20 dB and a nominal Psat of 19 dBm across the frequency range of 55 to 90 GHz. The DC power requirement for the amplifier is +12 VDC/190 mA. The input and output port configuration offers an inline structure with WR-12 waveguides and UG-387/U-M anticocking flanges.

Features:

- Frequency range: 55-90GHz
- Gain: 20dB Typ
- Output Power Psat: 19dBm Typ
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	55		90	GHz
Small Signal Gain		20		dB
Output Psat		19		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		12		V DC
DC Supply Current		190		mA

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	WR-12/UG-387/U	
DC Bias	Solder Pin	
Size	39*30*23	mm

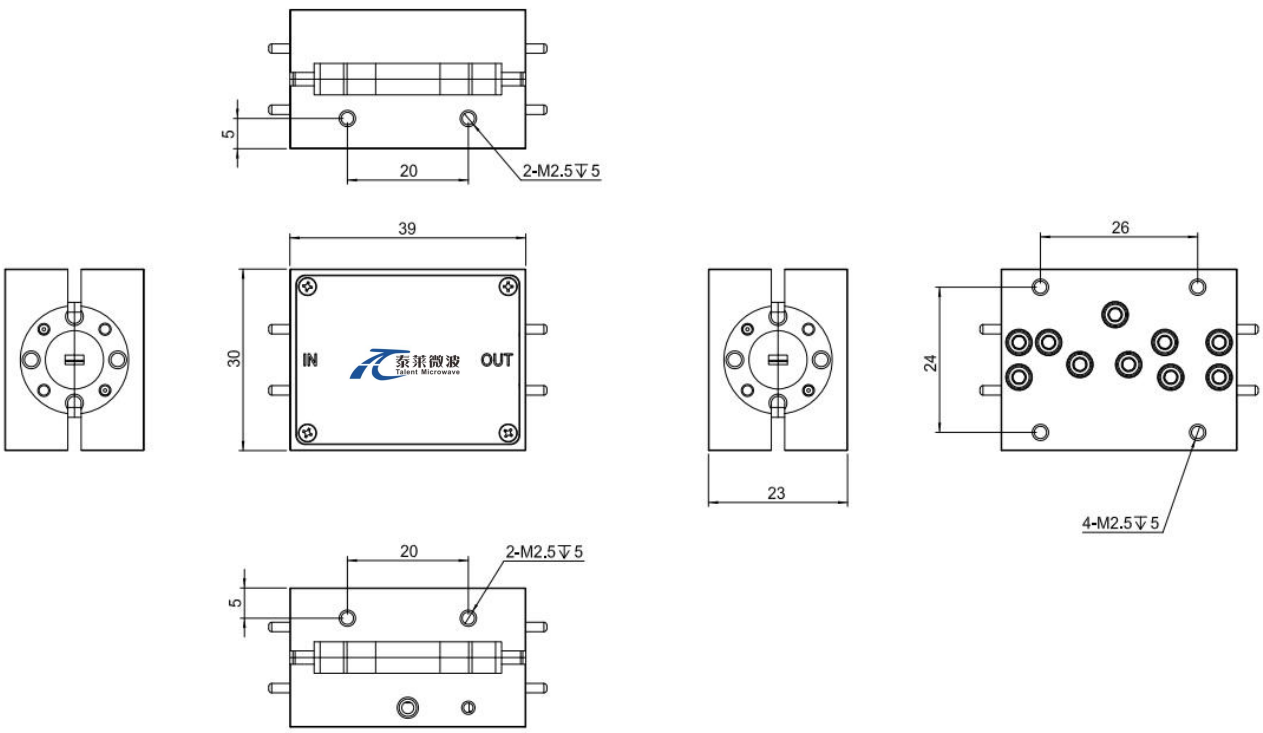
Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+10 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.

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

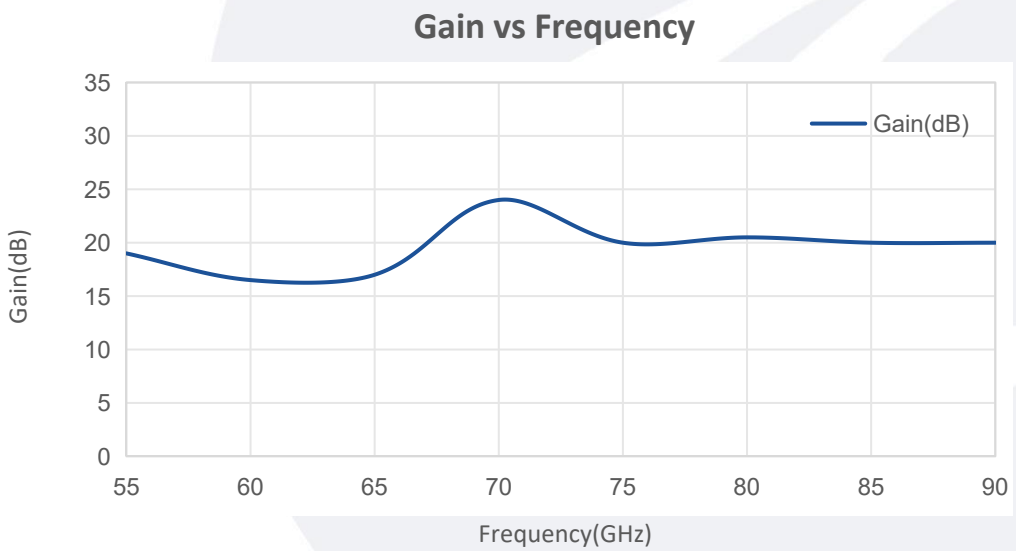
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	℃
Non-operating Temperature	-45		+85	℃
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-055090-2019-12	Power Amplifier, 55-90GHz, Gain: 20dB Type, Psat: 19dBm Type, +12V DC,WR-12, Without heatsink	Rev.1.1
TMPA-055090-2019-12-HS	Power Amplifier, 55-90GHz, Gain: 20dB Type, Psat: 19dBm Type, +12V DC,WR-12, With heatsink	Rev.1.1

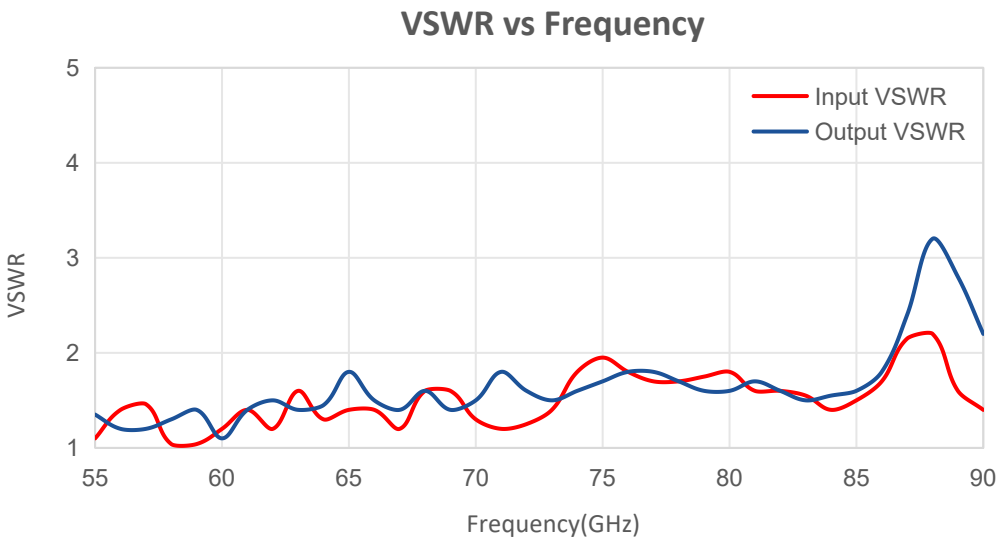
Typical Performance Data:

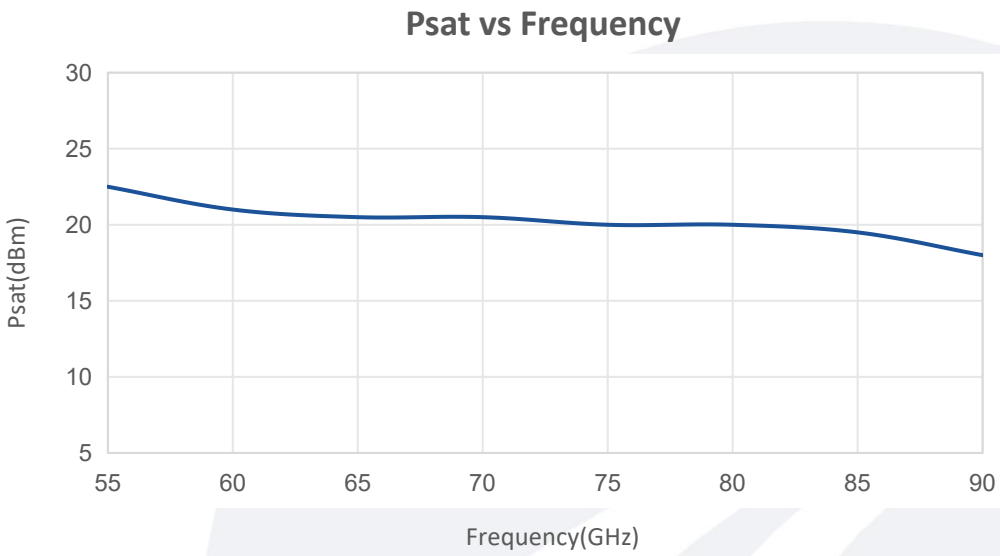


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Typical Performance Data:





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.