泰莱微波 Talent Microwave

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

Power Amplifier

WR-5.1/146-220GHz/12dB Gain/13dBm Psat Model: TMPA-146220-1913-05

TMPA-146220-1913-05 is a power amplifier with a typical small signal gain of 12 dB and a nominal Psat of 13 dBm across the frequency range of 146 to 220 GHz. The DC power requirement for the amplifier is +12 VDC/360 mA. The input and output port configuration offers an inline structure with WR-5.1 waveguides and UG-387/U-M anticocking flanges.

Features:

- Frequency range: 146-220GHz
- Gain: 12dB Typ
- Output Power Psat: 13dBm Typ
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	146		220	GHz
小信号增益 Small Signal Gain		12		dB
功率增益 Power Gain		9		dB
饱和输出功率 Output Psat		13		dBm
驻波 VSWR		3		:1
直流电压 DC Voltage		12		V DC
直流电流 DC Supply Current		360		mA

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	WR-5.1/UG-387/U	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	35.2*30*23(Without heatsink) 35.2*70*43(With heatsink)	mm

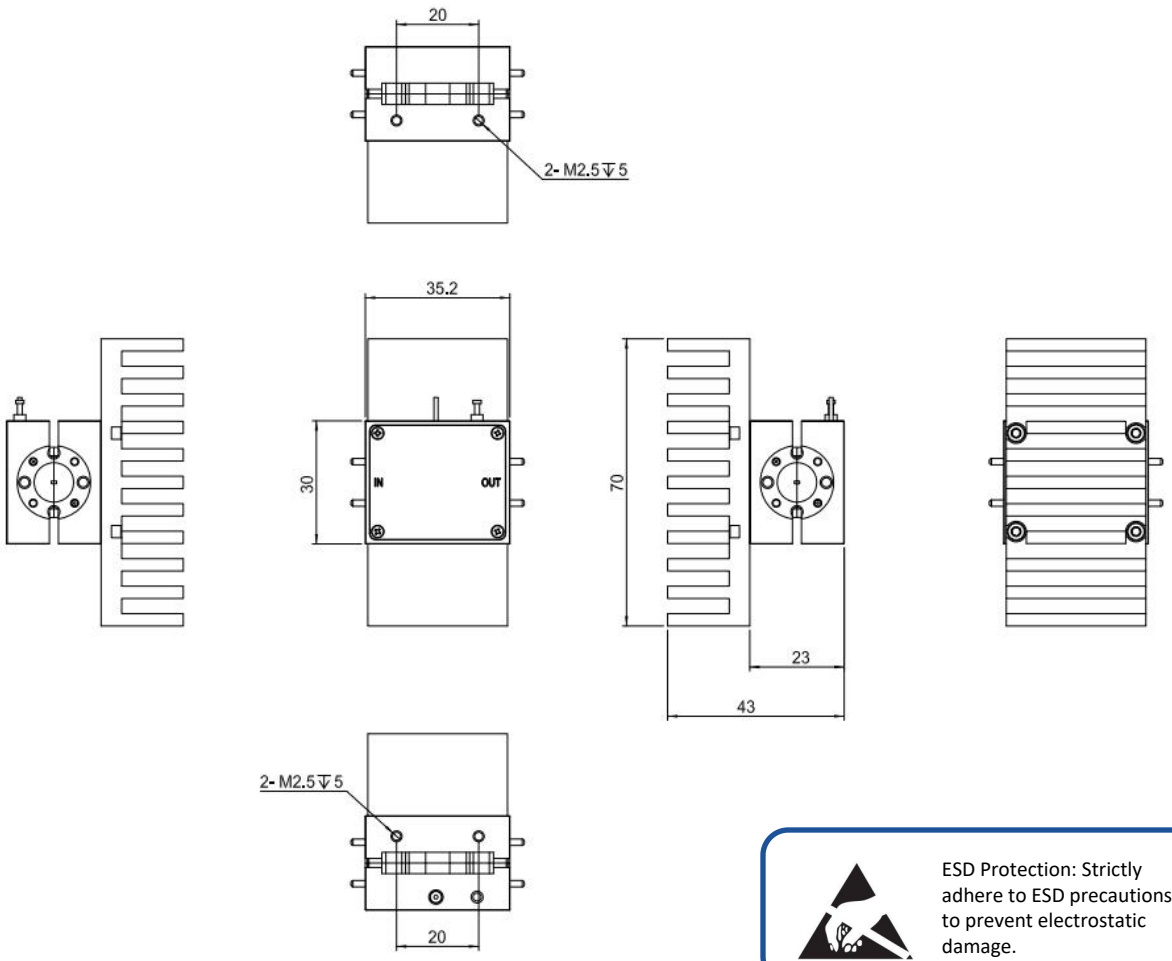
Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15 V
输入功率 RF Input Power	+10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

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

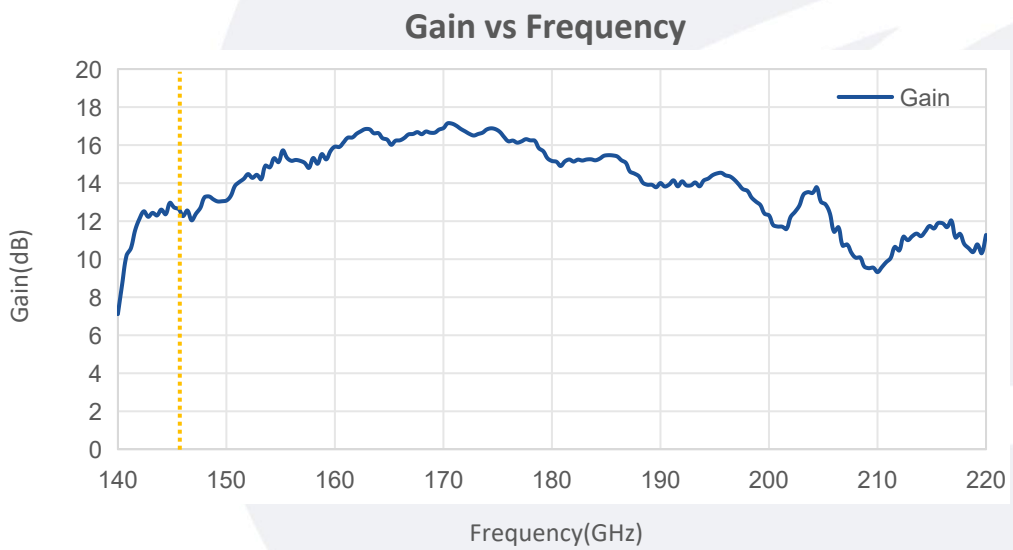
温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	℃
存储温度 Non-operating Temperature	-45		+85	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TMPA-146220-1913-05	Power Amplifier, 146-220GHz, Gain: 12dB Type, Psat: 13dBm Type, +12V DC,WR-5.1, Without heatsink	Rev.1.2
TMPA-146220-1913-05-HS	Power Amplifier, 146-220GHz, Gain: 12dB Type, Psat: 13dBm Type, +12V DC,WR-5.1, With heatsink	Rev.1.2

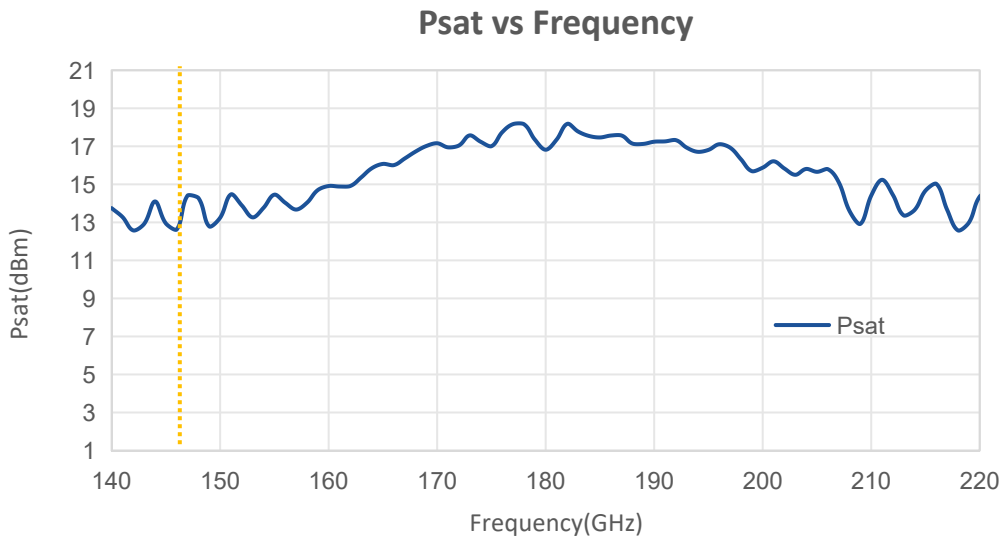
典型曲线 Typical Performance Data:

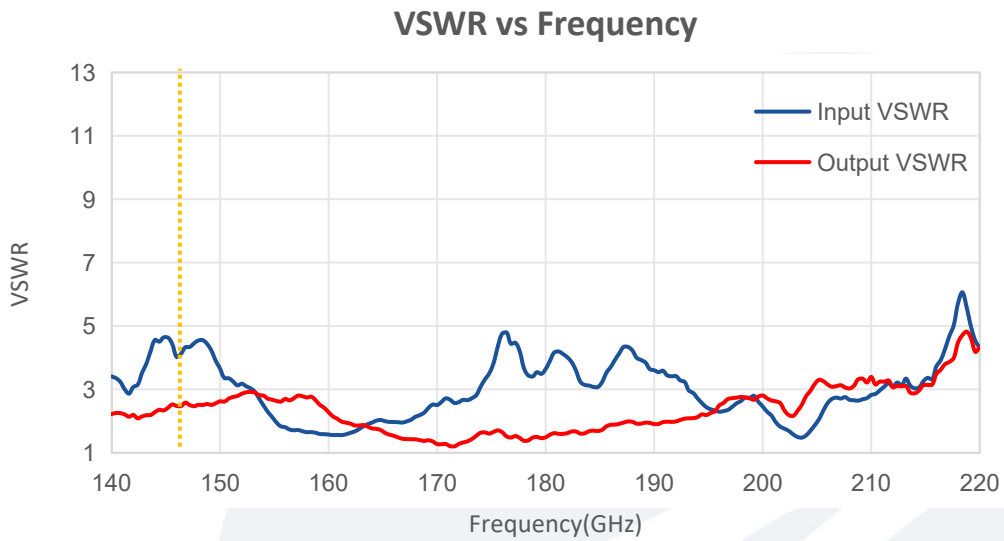


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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

典型曲线 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.