

Power Amplifier

WR-6.5/110-150GHz/35dB Gain/15dBm Psat

Model: TMPA-110150-3515-06

TMPA-110150-3515-06 is a power amplifier with a typical small signal gain of 35 dB and a nominal Psat of 15 dBm across the frequency range of 110 to 150 GHz. The DC power requirement for the amplifier is +5 VDC/400 mA. The input and output port configuration offers an inline structure with WR-6.5 waveguides and UG-387/U-M antcocking flanges.

Features:

- Frequency range: 110-150GHz
- Gain: 35dB Typ
- Output Power Psat: 15dBm 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	110		150	GHz
小信号增益 Small Signal Gain		35		dB
饱和输出功率 Output Psat		15		dBm
输入驻波 Input VSWR		2		:1
输出驻波 Output VSWR		2		:1
直流电压 DC Voltage		5		V DC
直流电流 DC Supply Current		400		mA

机械特性 Mechanical Specifications:

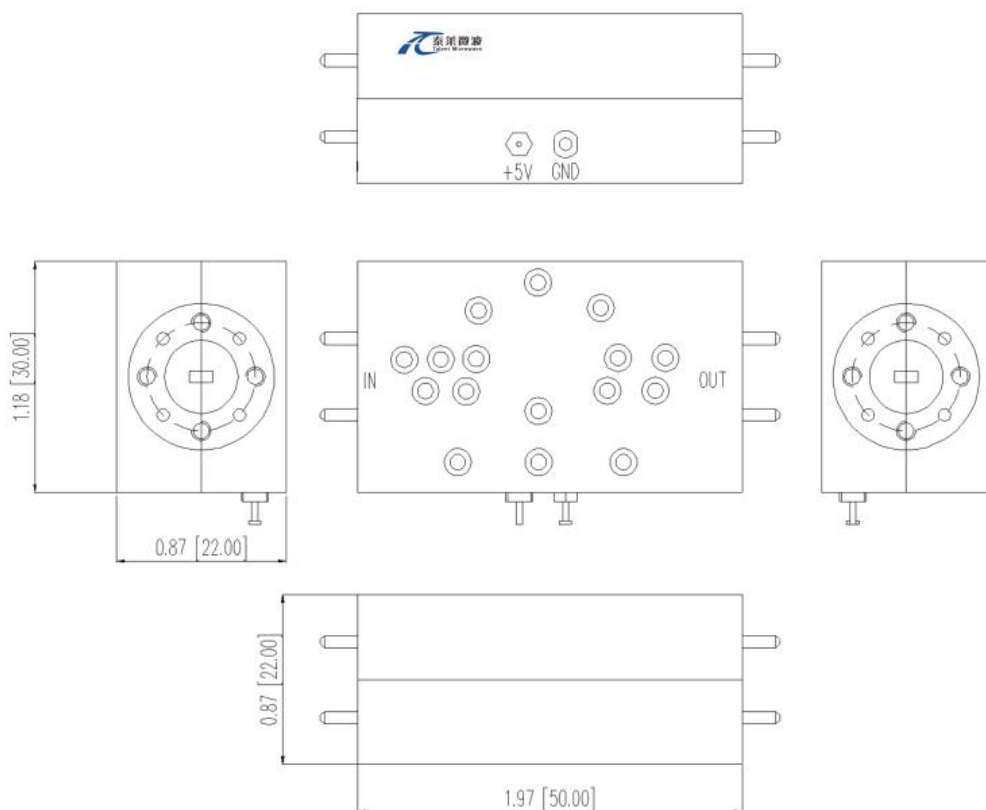
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	WR-6.5/UG-387/U	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	50*30*22	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	+11 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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



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

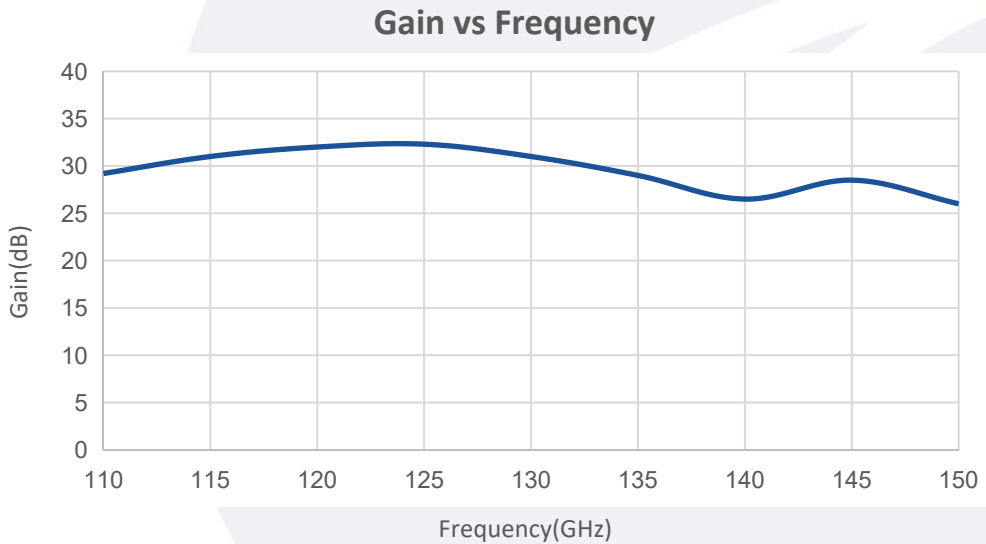
温度环境 Environmental Conditions:

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-110150-3515-06	Power Amplifier, 110-150GHz, Gain: 35dB Type, Psat: 15dBm Type, +5V DC,WR-6.5, Without heasink	Rev.1.0
TMPA-110150-3515-06-HS	Power Amplifier, 110-150GHz, Gain: 35dB Type, Psat: 15dBm Type, +5V DC,WR-6.5, With heatsink	Rev.1.0

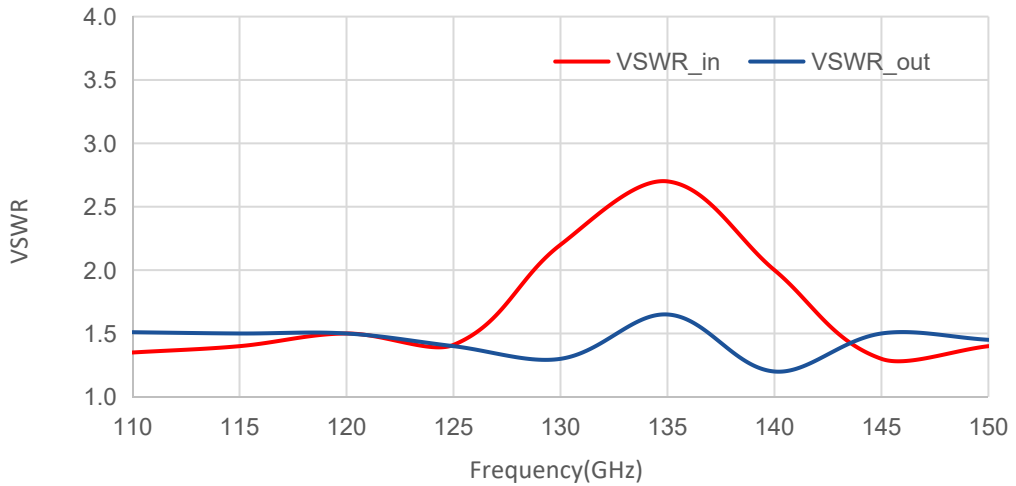
典型曲线 Typical Performance Data:



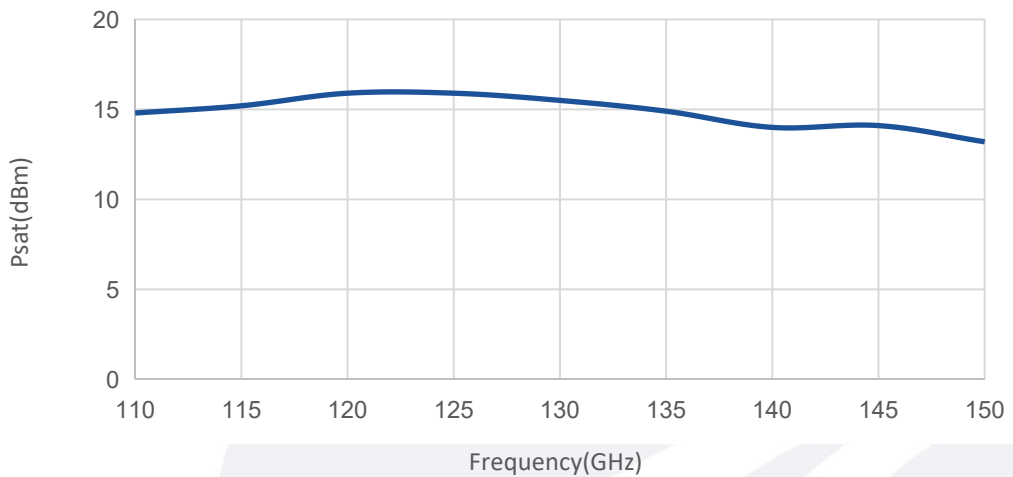
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

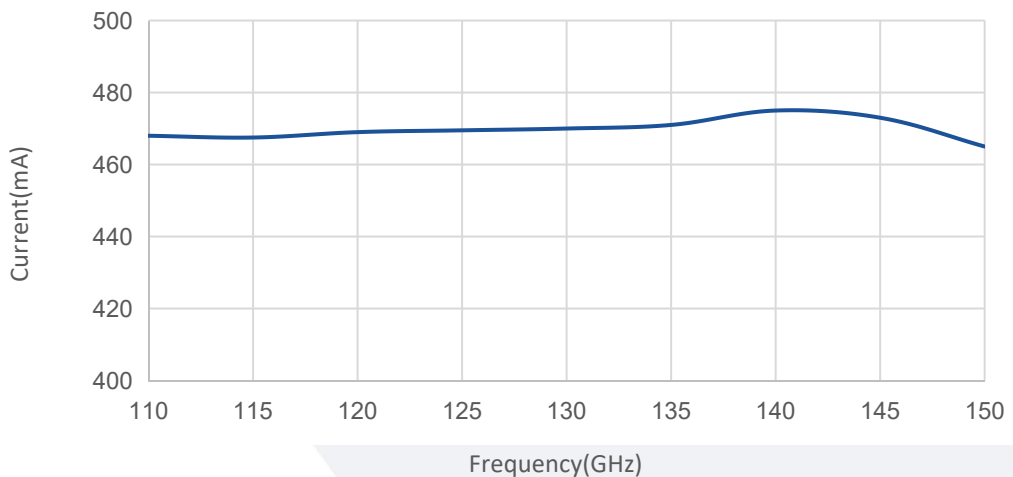
VSWR vs Frequency



Psat vs Frequency



Current 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.