

Power Amplifier

WR-12/76-81GHz/19dB Gain/32dBm Psat

Model: TMPA-076081-1932-12

TMPA-076081-1932-12 is a power amplifier with a typical gain of 19 dB and a nominal Psat of 32 dBm across the frequency range of 76 to 81 GHz. The DC power requirement for the amplifier is +20 VDC/260 mA. The input and output port configuration offers an inline structure with WR-12 waveguides and UG-387/U-M antiracking flanges.

Features:

- Frequency range: 76-81GHz
- Gain: 19dB Typ
- Output Power Psat: 32dBm 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	76		81	GHz
增益 Gain		19		dB
饱和输出功率 Output Psat		32		dBm
输入驻波 Input VSWR		3.3		:1
输出驻波 Output VSWR		2.3		:1
直流电压 DC Voltage		20		V DC
直流电流 DC Supply Current		260		mA

机械特性 Mechanical Specifications:

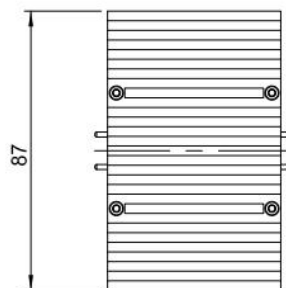
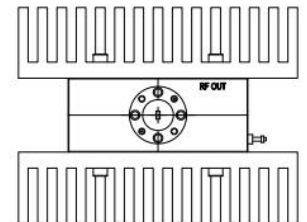
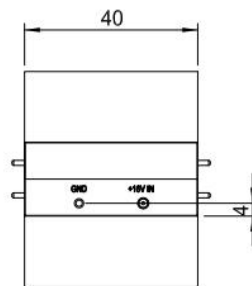
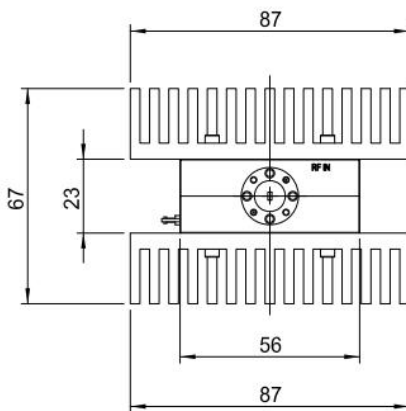
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	WR-12/UG-387/U	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	40*56*23(Without heatsink) 40*87*67 (With heatsink)	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+21 V
输入功率 RF Input Power	+26 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.

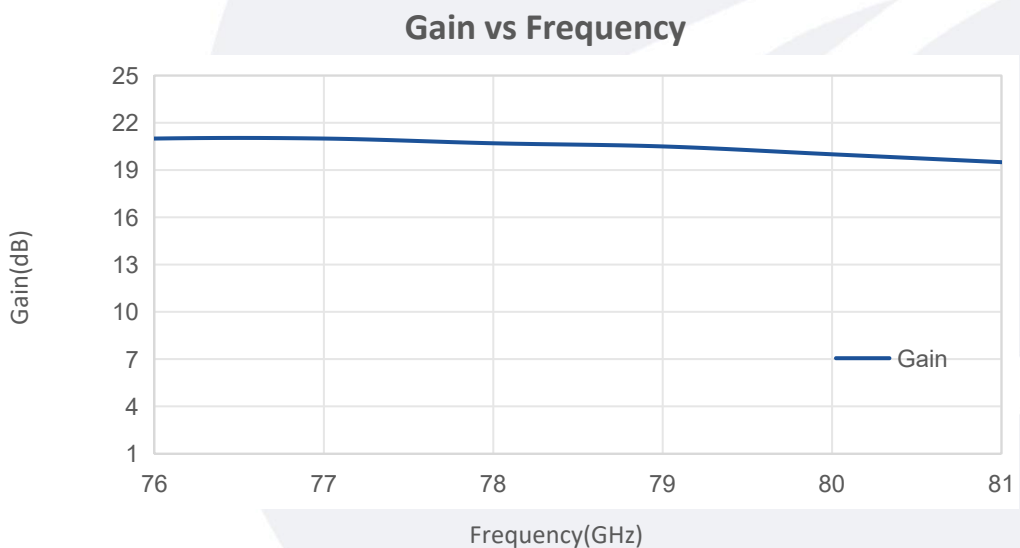
温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	°C
存储温度 Non-operating Temperature	-45		+85	°C
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:

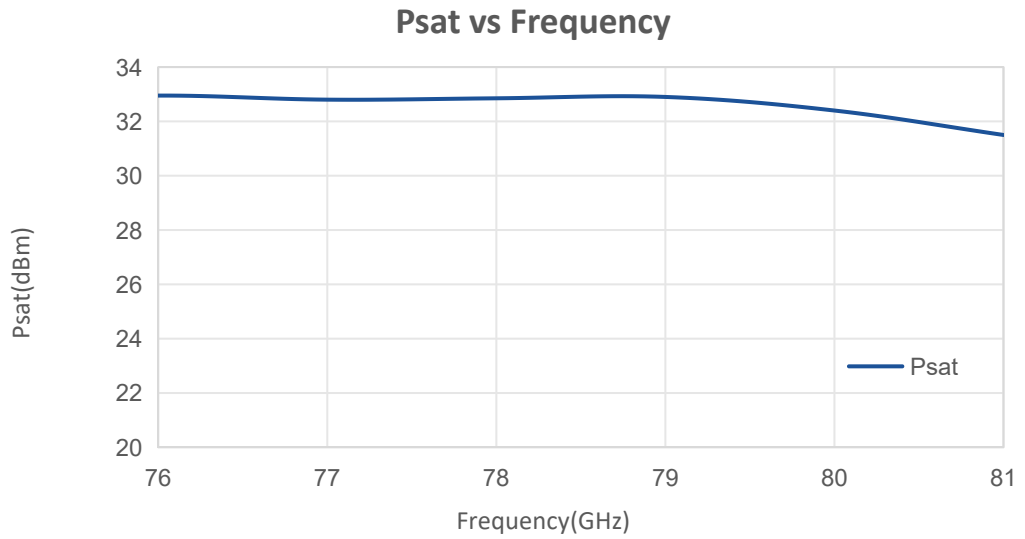
标准型号 Base Number	描述 Description	版本号 Revision
TMPA-076081-1932-12	Power Amplifier, 75-90GHz, Gain: 19dB Type, Psat: 32dBm Type, +20V DC,WR-12, Without heatsink	Rev.1.1
TMPA-076081-1932-12-HS	Power Amplifier, 75-90GHz, Gain: 19dB Type, Psat: 32dBm Type, +20V DC,WR-12, With heatsink	Rev.1.1

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.

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