Suzhou Talent Microwave,Inc
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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 anticocking 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

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	76		81	GHz
Gain		19		dB
Output Psat		32		dBm
Input VSWR		3.3		:1
Output VSWR		2.3		:1
DC Voltage		20		V DC
DC Supply Current		260		mA

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	WR-12/UG-387/U	
DC Bias	Solder Pin	
Size	40*56*23(Without heatsink) 40*87*67（With heatsink)	mm

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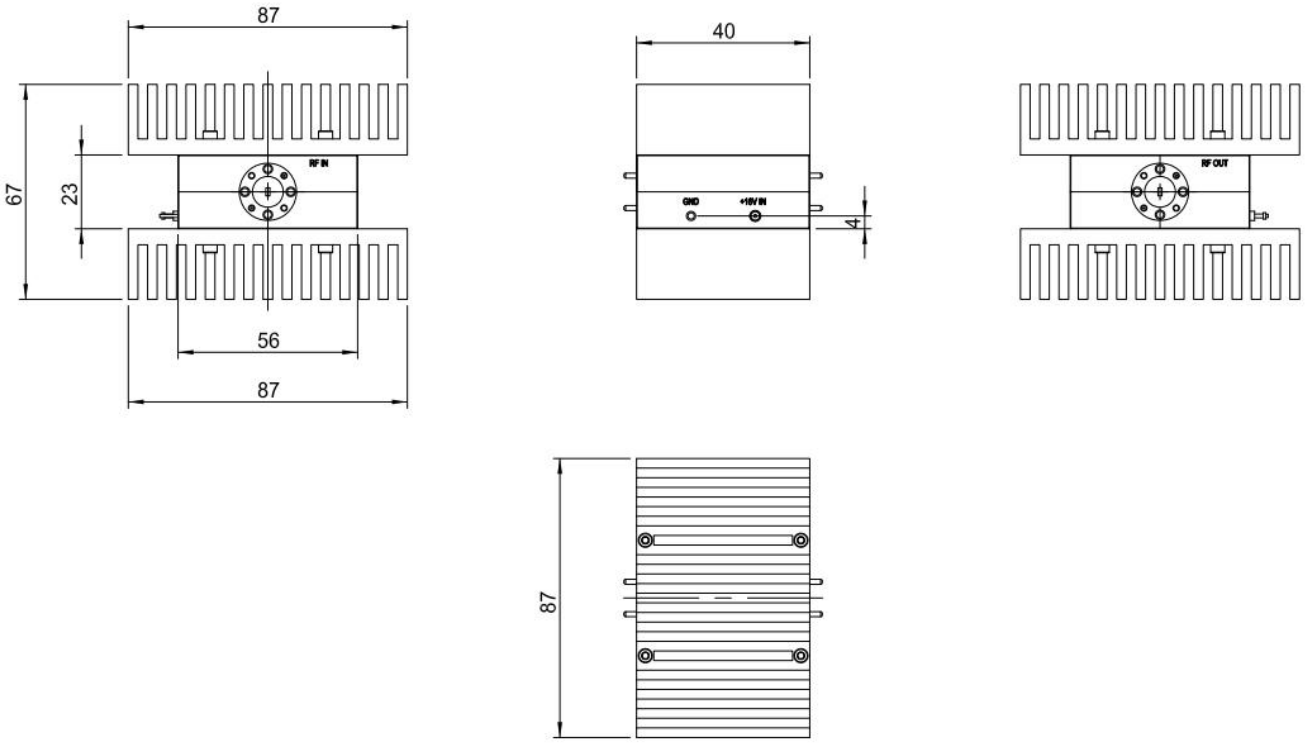
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+21 V
RF Input Power	+26 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

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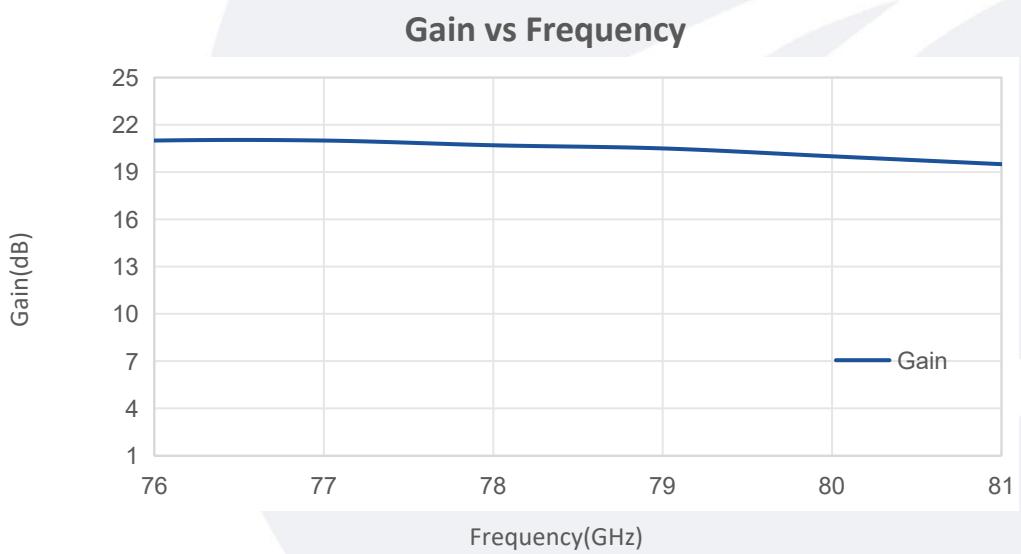
Environmental Conditions:

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-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

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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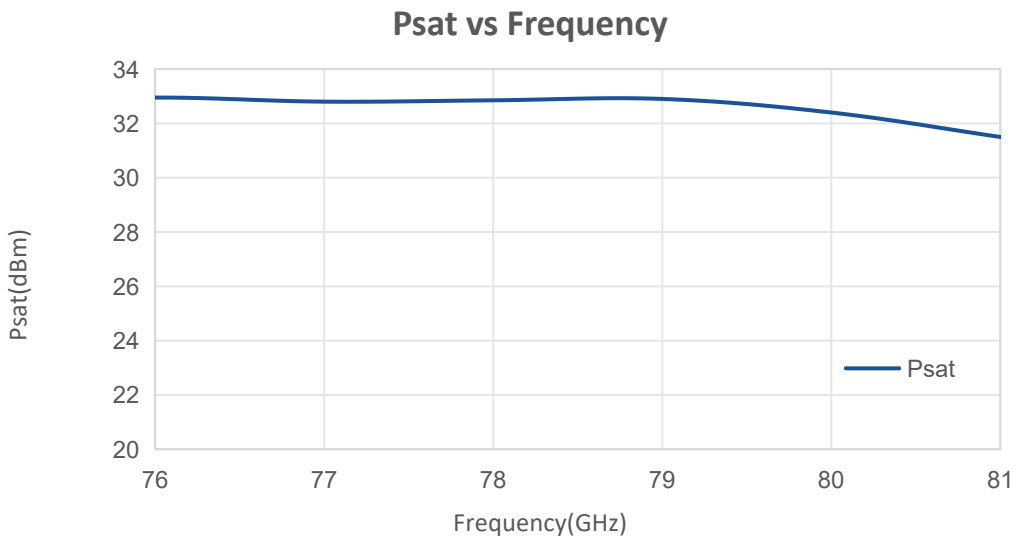

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