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

Low Noise Amplifier

WR-4.3/195-230GHz/6.8dB NF/22dB Gain Model: TMLA-195230-2568-04

TMLA-195230-2568-04 is a Y-Band low noise amplifier with a typical small signal gain of 22 dB and a nominal noise figure of 6.8 dB across the frequency range of 195 to 230 GHz. The DC power requirement for the amplifier is +5 VDC/40 mA. The input and output port configuration offers an inline structure with WR-4.3 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range:195-230GHz
- Gain: 22dB Typ
- Noise Figure: 6.8dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	195		230	GHz
Small Signal Gain		22		dB
Noise Figure		6.8		dB
Input VSWR		2		:1
Output VSWR		2.5		:1
DC Voltage		5		V DC
DC Supply Current		40		mA

Mechanical Specifications:

Parameter	Value	Units
Input Connector	WR-4.3/ UG-387/U	
Output Connector	WR-4.3/ UG-387/U	
Power Supply Pin	Solder Pin	
Size	35*30*23	mm

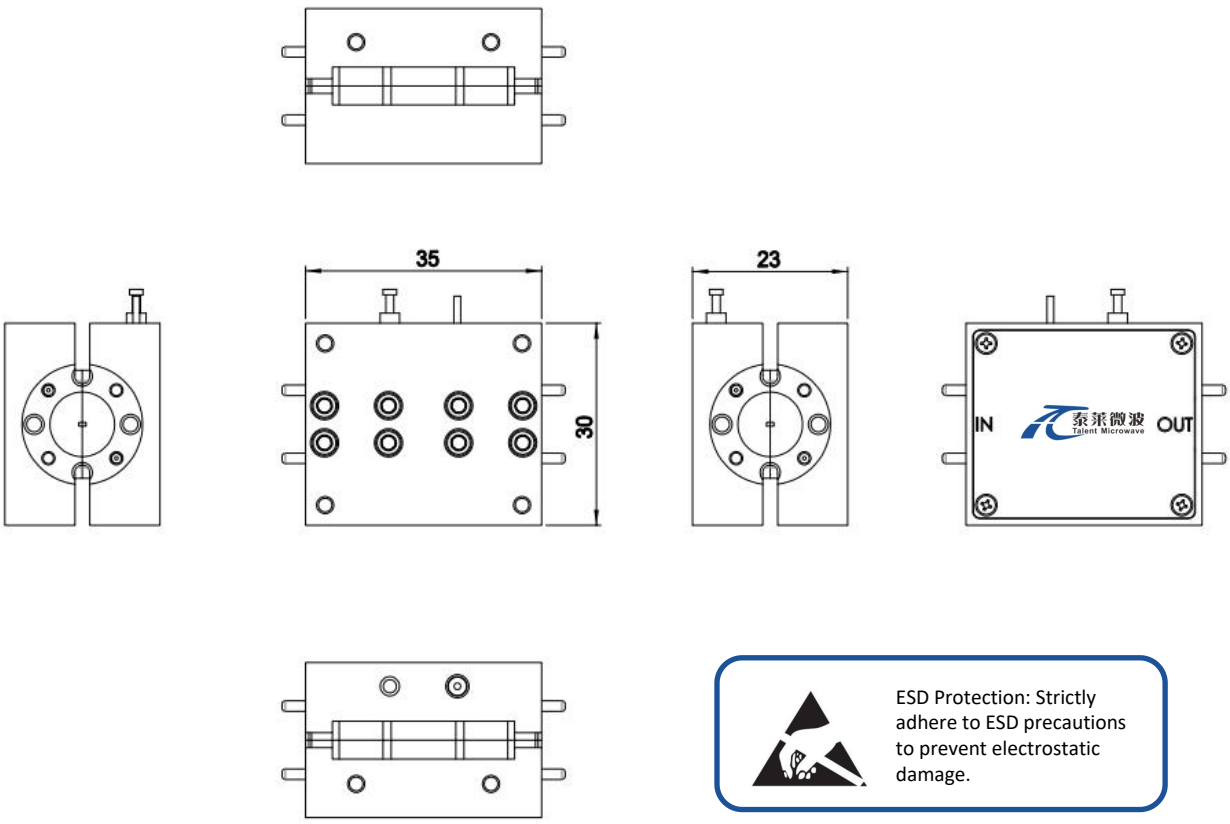
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Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+6 V
RF Input Power	TBD
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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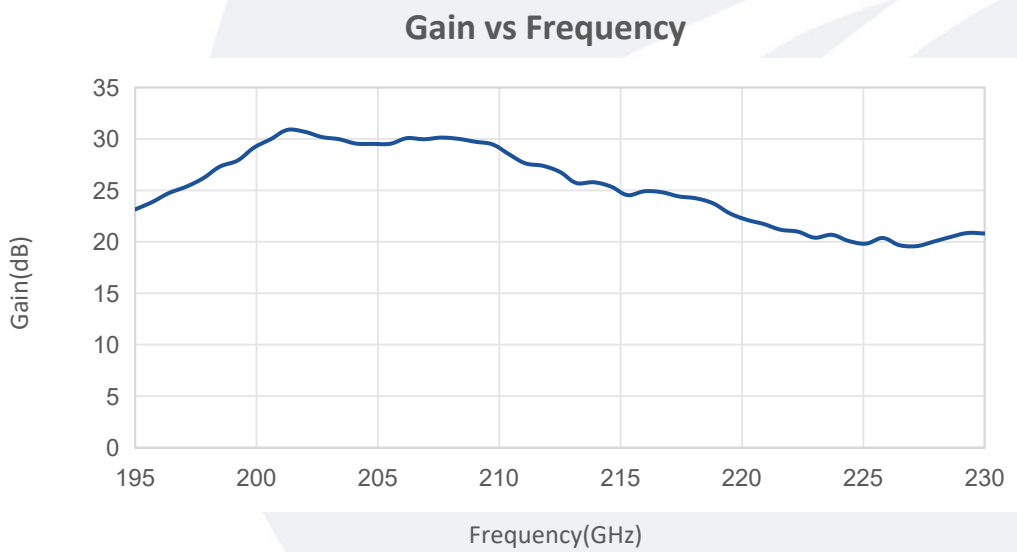
Environmental Conditions:

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
TMLA-195230-2568-04	Low Noise Amplifier,195-230GHz, Noise Figure:6.8dB, Gain:22dB,+5V DC,WR-4.3	Rev.1.1

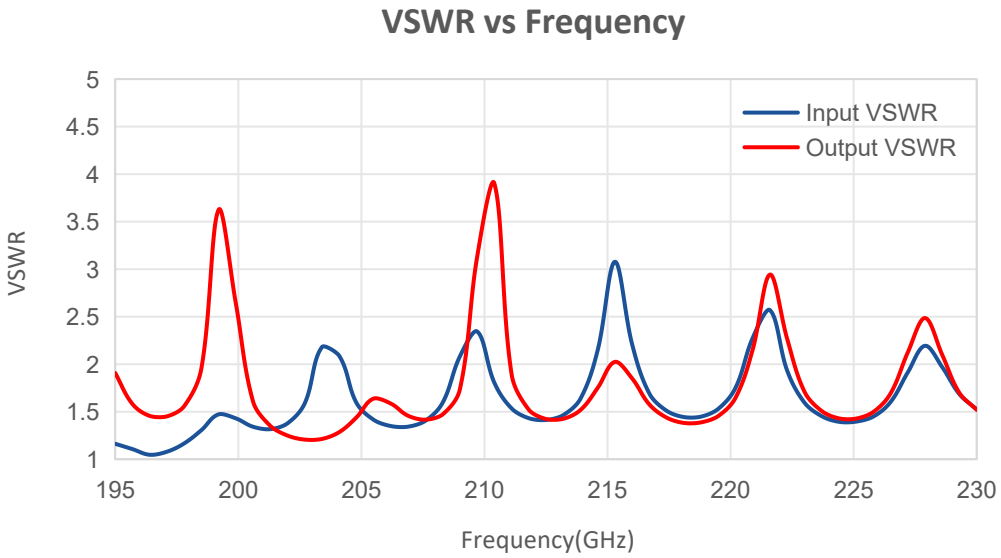
Typical Performance Data:



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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