

Low Noise Amplifier

WR-03/219-270GHz /8.0dB NF/15dB Gain

Model: TMLA-219270-1580-03

TMLA-219270-1580-03 is a low noise amplifier with a typical small signal gain of 15 dB and a nominal noise figure of 8.0 dB across the frequency range of 219 to 270 GHz. The DC power requirement for the amplifier is +12 VDC/36 mA. The input and output port configuration offers an inline structure with WR-03 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range:219-270GHz
- Gain: 15dB Typ
- Noise Figure: 8.0dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	219		270	GHz
Gain		15		dB
Noise Figure		8.0		dB
DC Voltage		+12		V DC
DC power supply		38		mA

Mechanical Specifications:

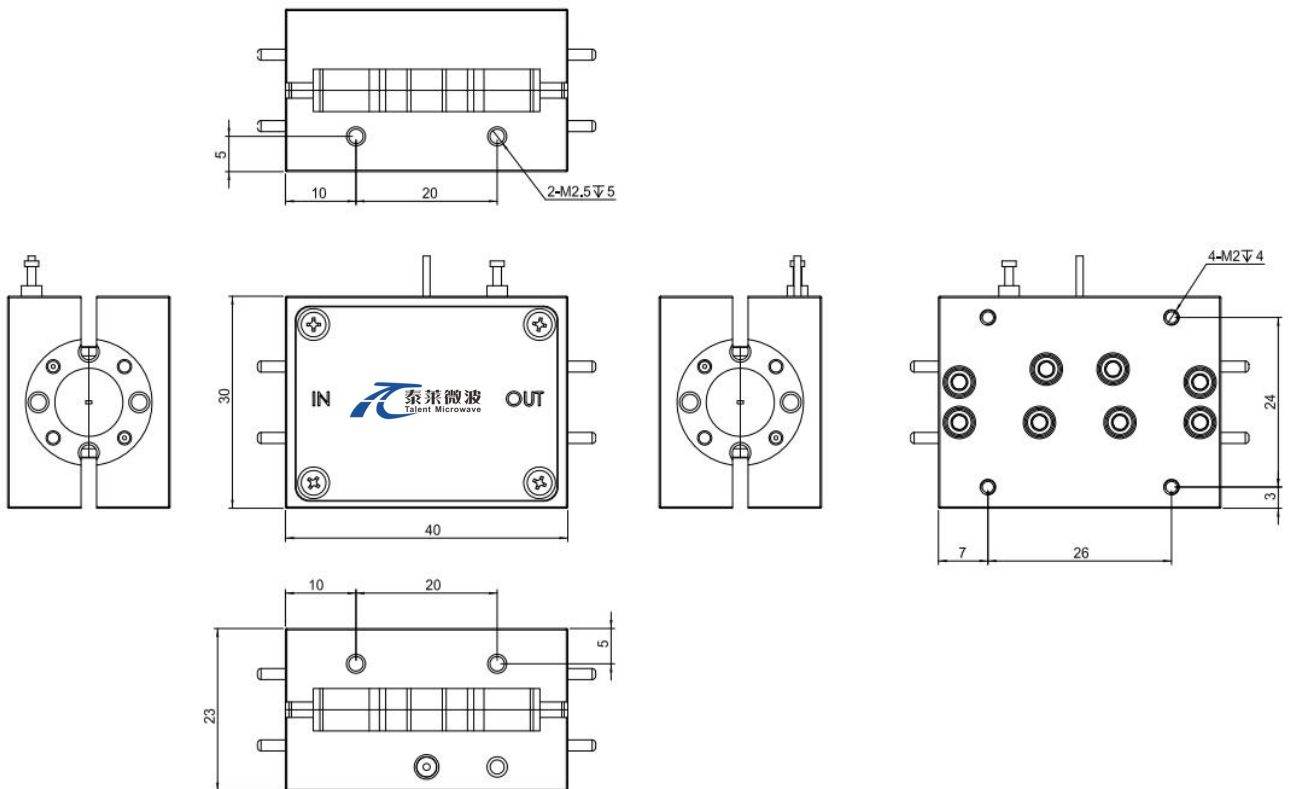
Parameter	Value	Units
Input Connector	WR-03/ UG-387/U	
Output Connector	WR-03/ UG-387/U	
Power Supply Pin	Solder Pin	
Size	40*30*23	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Environmental Conditions:

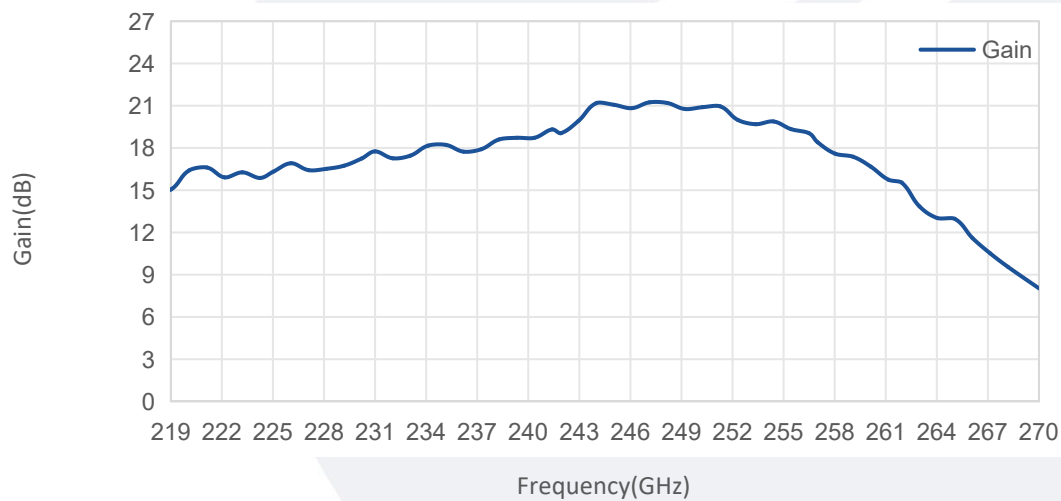
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMLA-219270-1580-03	Low Noise Amplifier,219-270GHz, Noise Figure:8.0dB, Gain:15dB,+12V DC,WR-03	Rev.1.1

Typical Performance Data:

Gain 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.