

Low Noise Amplifier

WR-4.3/210-260GHz/7dB NF/15dB Gain

Model: TMLA-210260-1970-04

TMLA-210260-1970-04 is a H-Band low noise amplifier with a typical small signal gain of 15 dB and a nominal noise figure of 7 dB across the frequency range of 210 to 260 GHz. The DC power requirement for the amplifier is +5 VDC /35 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:210-260GHz
- Gain: 15dB Typ
- Noise Figure: 7dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	210		260	GHz
Small Signal Gain		15		dB
Noise Figure		7		dB
Input VSWR		2.5		:1
Output VSWR		3.5		:1
DC Voltage		5		V DC
DC power supply		35		mA

Mechanical Specifications:

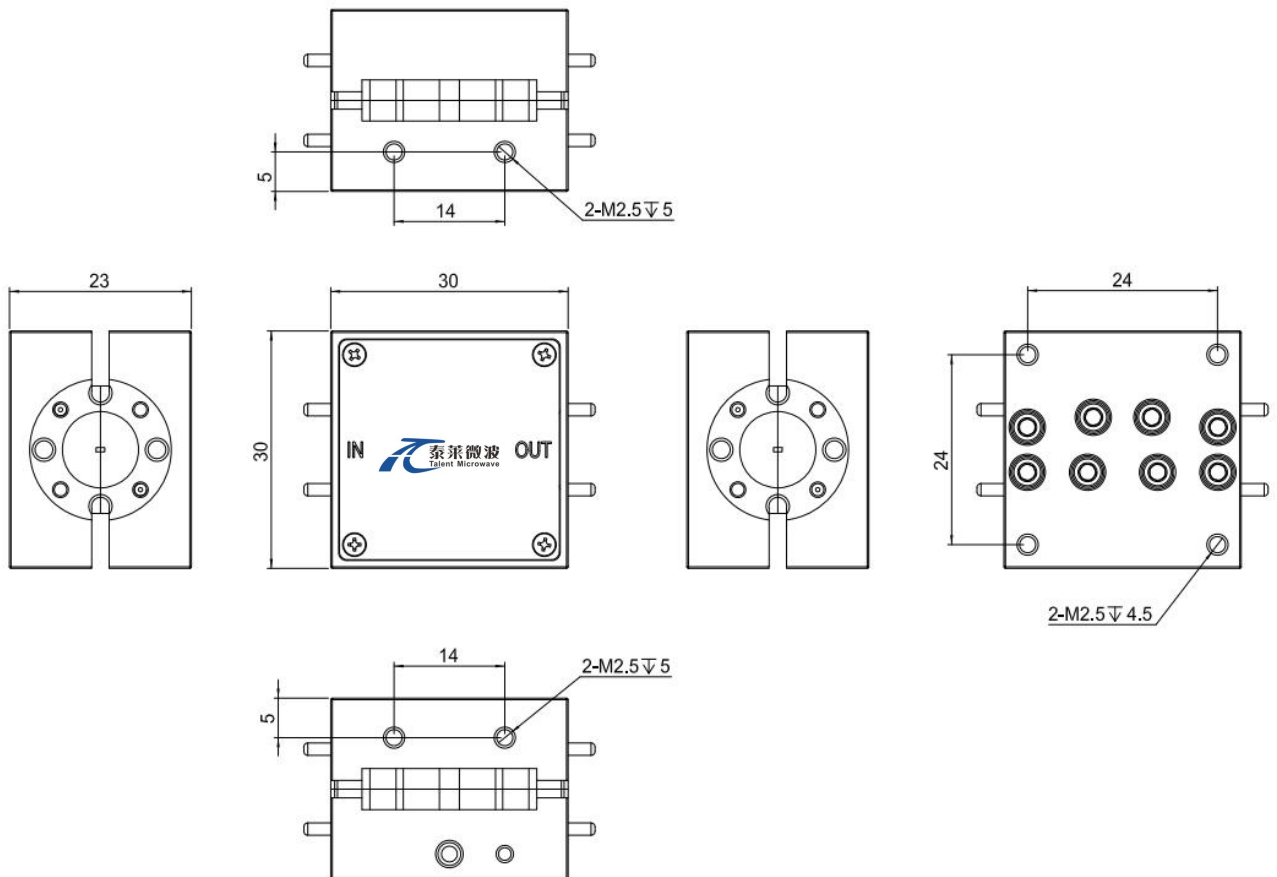
Parameter	Value	Units
Input Connector	WR-4.3/ UG-387/U	
Output Connector	WR-4.3/ UG-387/U	
Power Supply Pin	Solder Pin	
Size	30*30*23	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+8 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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

Environmental Conditions:

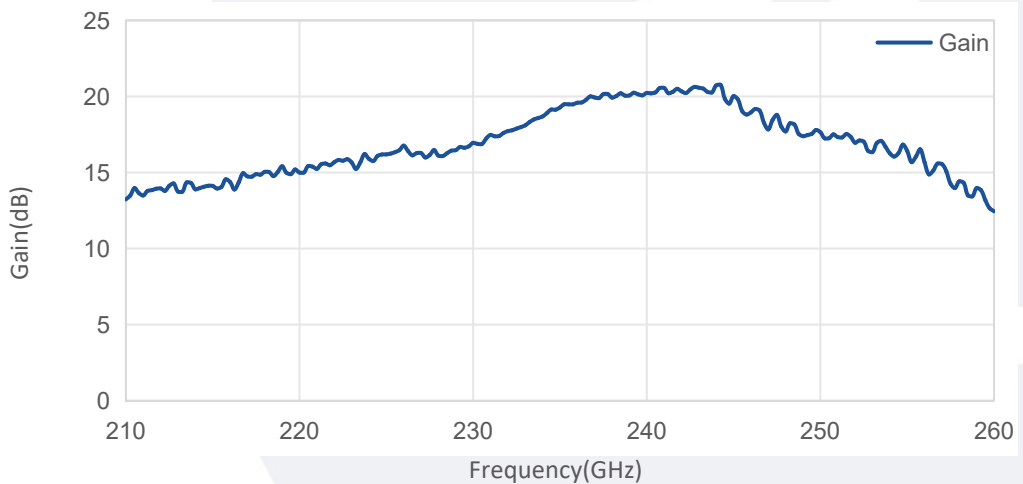
Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMLA-210260-1970-04	Low Noise Amplifier,210-260GHz, Noise Figure:7.0dB, Gain:15dB,+5V DC,WR-4.3	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.