

Low Noise Amplifier

WR-3.4/310-330GHz/9dB NF/25dB Gain

Model: TMLA-310330-3090-3.4

TMLA-310330-3090-3.4 is a low noise amplifier with a typical small signal gain of 25 dB and a nominal noise figure of 9 dB across the frequency range of 310 to 330 GHz. The DC power requirement for the amplifier is +12 VDC /80 mA. The input and output port configuration offers an inline structure with WR-3.4 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range: 310-330GHz
- Gain: 25dB Typ
- Noise Figure: 9dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	310		330	GHz
Small Signal Gain		25		dB
Noise Figure		9		dB
DC Voltage		12		V DC
DC Supply Current		80		mA

Mechanical Specifications:

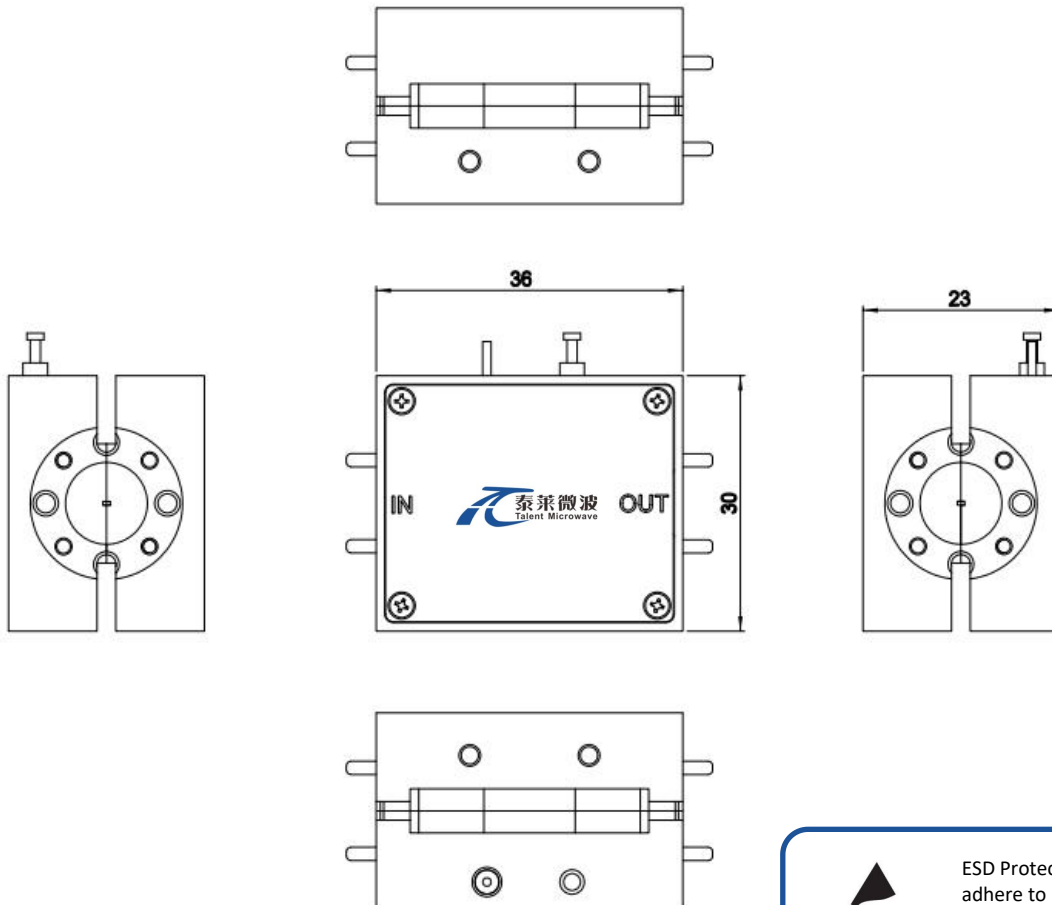
Parameter	Value	Units
Input Connector	WR-3.4/ UG-387/U	
Output Connector	WR-3.4/ UG-387/U	
Power Supply Pin	Solder Pin	
Size	36*30*23	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+10 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.

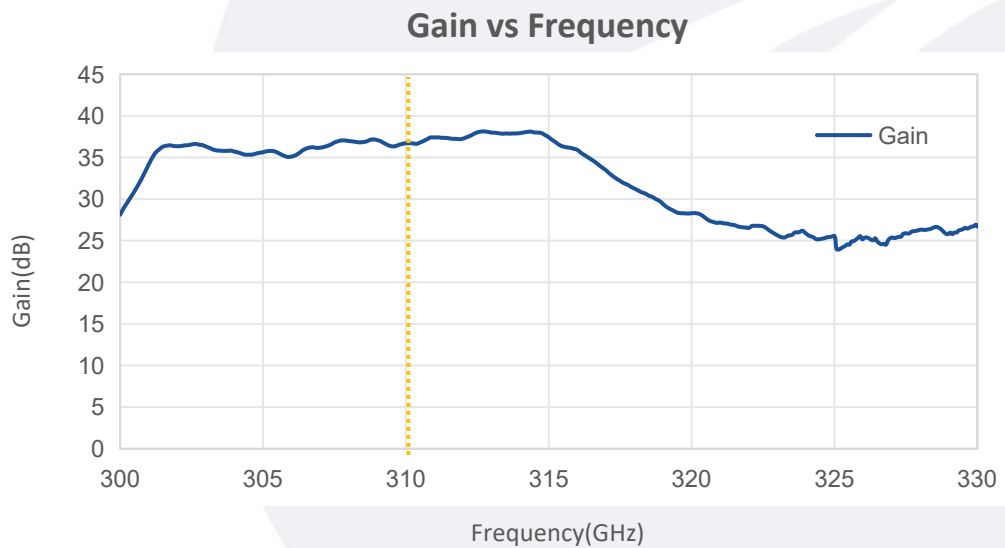
Environmental Conditions:

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-310330-3090-3.4	Low Noise Amplifier,310-330GHz, Noise Figure:9dB, Gain:25dB, +12V DC, WR-3.4	Rev.1.0

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.