Suzhou Talent Microwave,Inc
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Low Noise Amplifier

WR-12/60-90GHz/4.0dB NF/38dB Gain Model: TMLA-060090-3840-12

TMLA-060090-3840-12 is a E-Band low noise amplifier with a typical small signal gain of 38 dB and a nominal noise figure of 4.0 dB across the frequency range of 60 to 90 GHz. The DC power requirement for the amplifier is +12 VDC /60 mA. The input and output port configuration offers an inline structure with WR-12 waveguides and UG-387/U-M anti-cocking flanges.

Features:

- Frequency range:60-90GHz
- Gain: 38dB Typ
- Noise Figure: 4.0dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	60		90	GHz
Small Signal Gain		38		dB
Noise Figure		4.0		dB
Output P1dB		12		dBm
Input VSWR		3		:1
Output VSWR		2		:1
DC Voltage		12		V DC
DC Supply Current		60		mA

Mechanical Specifications:

Parameter	Value	Units
Input Connector	WR-12/ UG-387/U	
Output Connector	WR-12/ UG-387/U	
Power Supply Pin	Solder Pin	
Size	45*30*23	mm

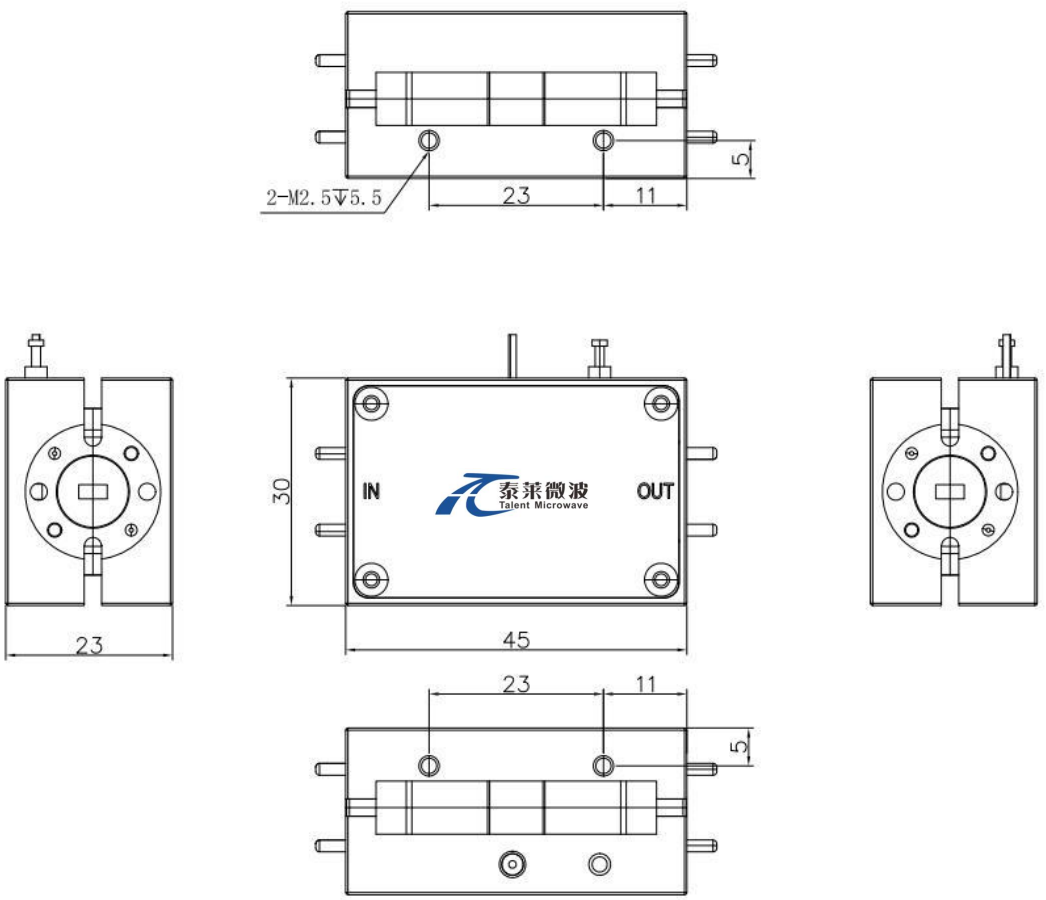
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Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 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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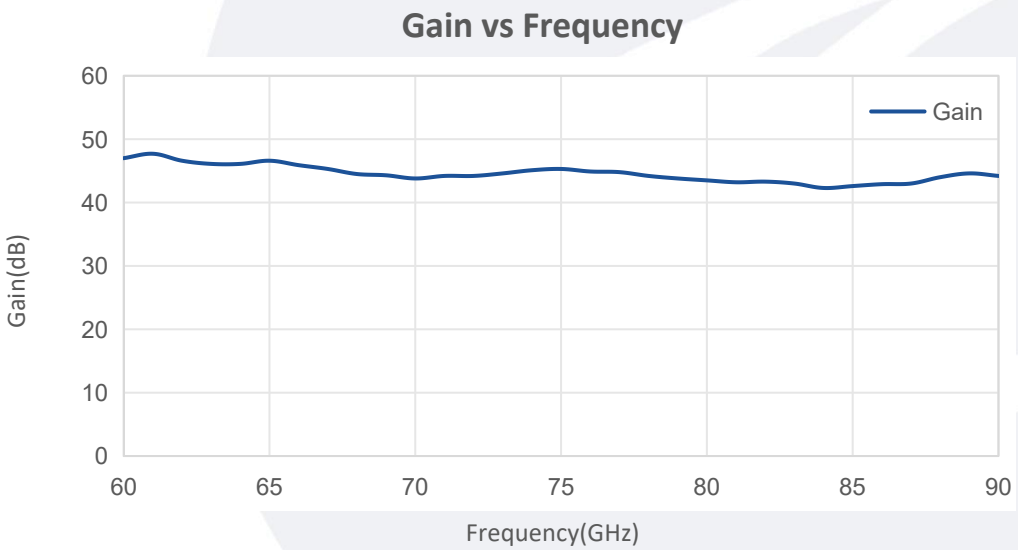
Environmental Conditions:

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-060090-3840-12	Low Noise Amplifier,60-90GHz, Noise Figure:4.0dB, Gain:38dB,+12V DC,WR-12	Rev.1.0

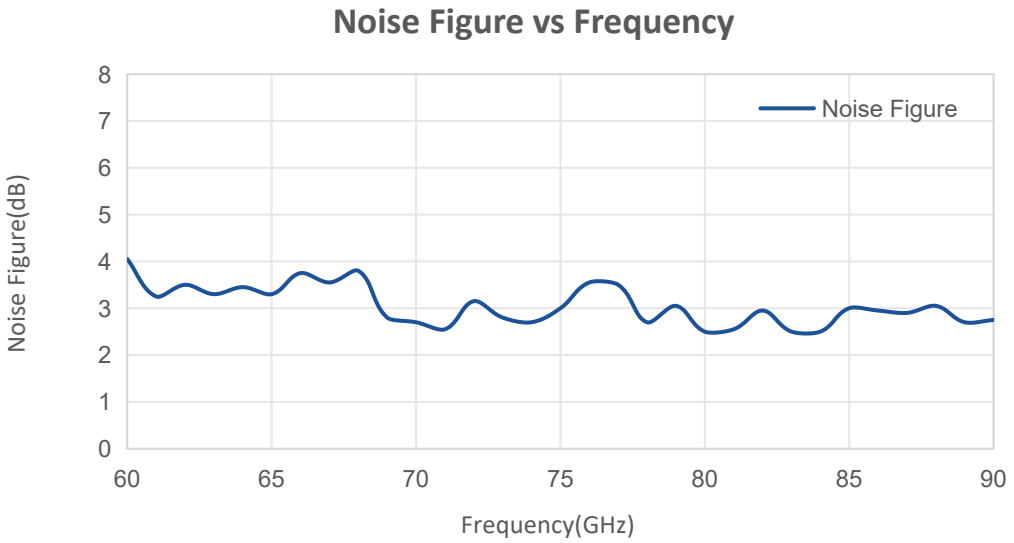
Typical Performance Data:

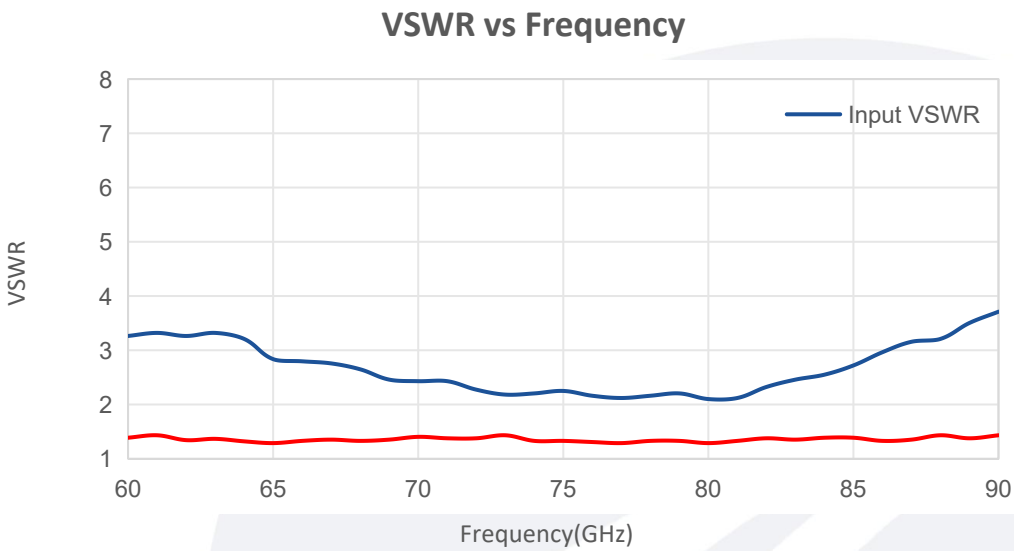


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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