泰莱微波
Talent Microwave

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Low Noise Amplifier

WR-19/40-60GHz/5.0dB NF/25dB Gain Model: TMLA-040060-2550-19-N

TMLA-040060-2550-19-N is a U-Band low noise amplifier with a typical small signal gain of 25 dB and a nominal noise figure of 5.0 dB across the frequency range of 40 to 60 GHz. The DC power requirement for the amplifier is +8 VDC /250 mA. The input and output port configuration offers an inline structure with WR-19 waveguides and UG-383/U-M anti-cocking flanges.

Features:

- Frequency range:40-60GHz
- Gain: 25dB Typ
- Noise Figure: 5.0dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- 5G Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	40		60	GHz
Small Signal Gain	20	25	30	dB
Noise Figure		5.0		dB
Output P1dB		15		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		8		V DC
DC Supply Current		250		mA

Mechanical Specifications:

Parameter	Value	Units
Input Connector	WR-19/ UG-383/U	
Output Connector	WR-19/ UG-383/U	
Power Supply Pin	Solder Pin	
Size	45*30*30	mm

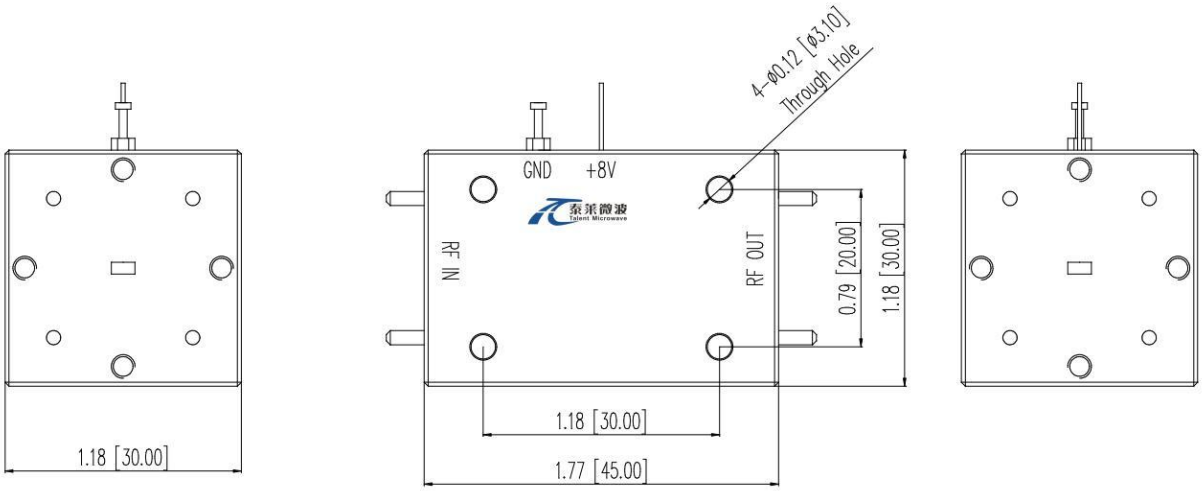
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Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+10 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:

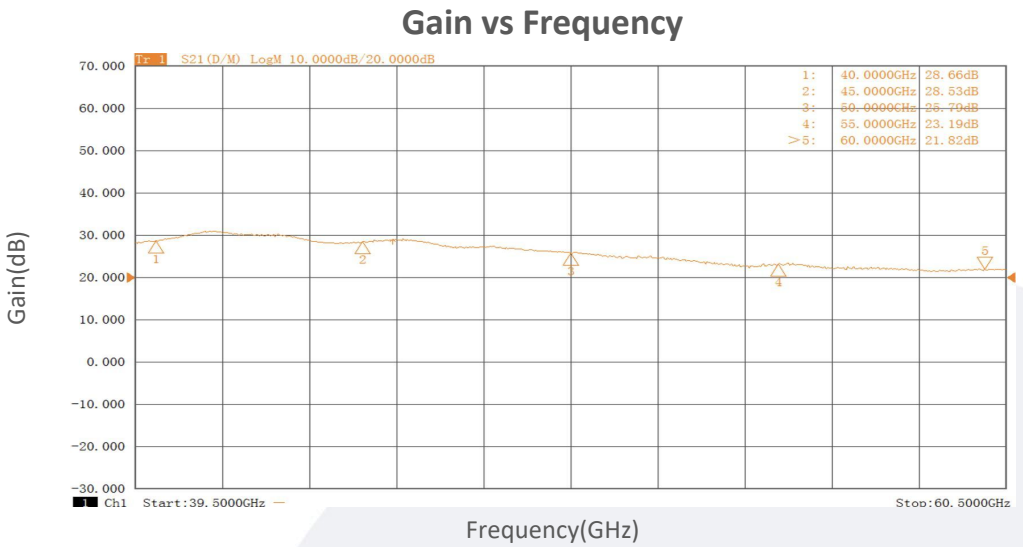
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+75	℃
Non-operating Temperature	-55		+85	℃
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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Ordering Information:

Base Number	Description	Revision
TMLA-040060-2550-19	Low Noise Amplifier,40-60GHz, Noise Figure:5.0dB, Gain:25dB, +8V DC,WR-19	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.