

75-110GHz Low Noise Amplifier

1.0mm(f)/75-110GHz /4.5dB NF/25dB Gain

Model: TLLA75G110G-25-45

TLLA75G110G-25-45 is a W-Band low noise amplifier with a typical small signal gain of 25 dB and a nominal noise figure of 4.5 dB across the frequency range of 75 to 110 GHz. The DC power requirement for the amplifier is +12 VDC. The input and output port configuration offers coax adapter structure with 1.0mm female.

Features:

- Ultra Wide Band: 75-110GHz
- Gain: 25dB Typ
- Noise Figure: 4.5dB Typ
- Unconditional stability

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range		75-110		GHz
Gain		25		dB
Noise Figure		4.5		dB
Output Psat		15		dBm
DC Voltage		12		V DC
Impedance		50		Ohms

Mechanical Specifications:

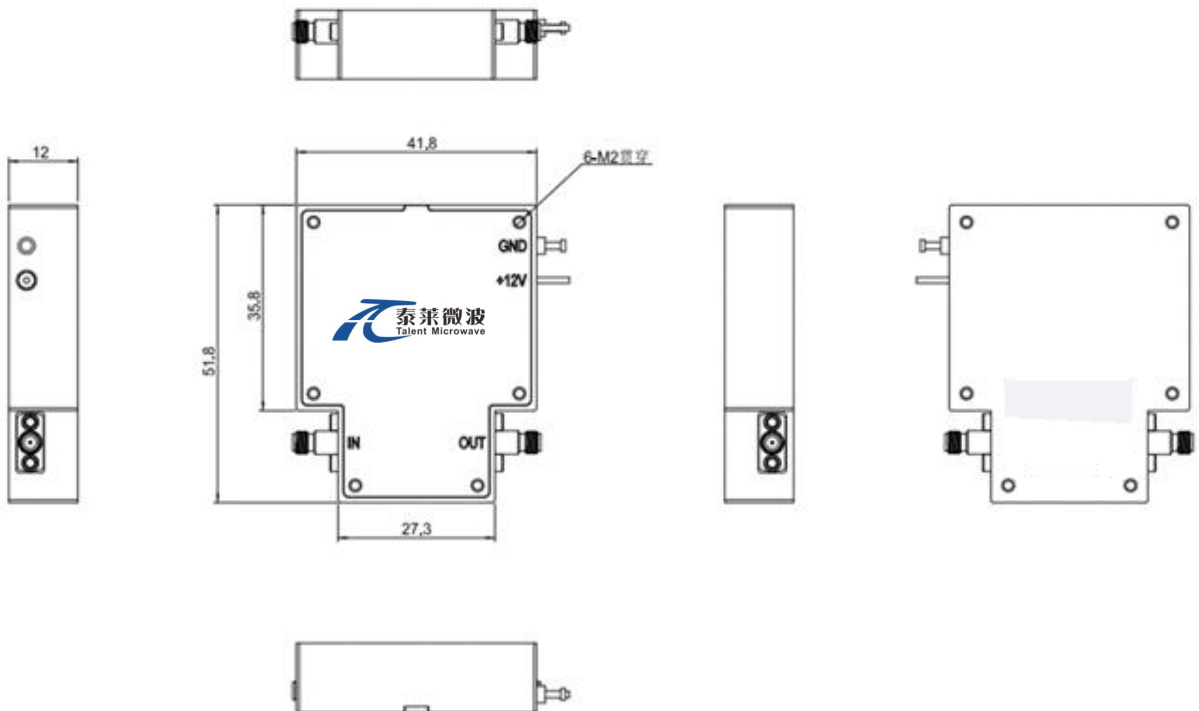
Parameter	Value	Units
Input /Output Connector	1.0mm Female/1.0mm Female	
DC Bias	Solder Pin	
Size	51.8x41.8x12	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+0dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



*****Heat Sink Required During Operation**



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
TLLA75G110G-25-45	Low Noise Amplifier, 75-110 GHz, Noise Figure:2.0dB,Gain:25 dB Type +12V DC,1.0mm Female	Rev.1.1