Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Low Noise Amplifier

0.1-50GHz/5.0dB NF/27dB Gain/13dBm P1dB

Model: TLLA0.1G50G-27-50

TLLA0.1G50G-27-50 is a low noise amplifier with a typical small signal gain of 27 dB and a nominal noise figure of 5.0 dB across the frequency range of 0.1 to 50 GHz. The DC power requirement for the amplifier is +8 V DC/320 mA. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Frequency range: 0.1-50GHz
- Gain: 27dB Typ
- Noise Figure: 5.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	0.1		50	GHz
Small Signal Gain	25	27		dB
Noise Figure		5.0	7	dB
Output P1dB	12	13		dBm
Output Psat		13.5		dBm
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage	+5	+8	+12	V DC
DC Supply Current		320		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	35*40*12(Without Heatsink) 75*40*32(With Heatsink)	mm

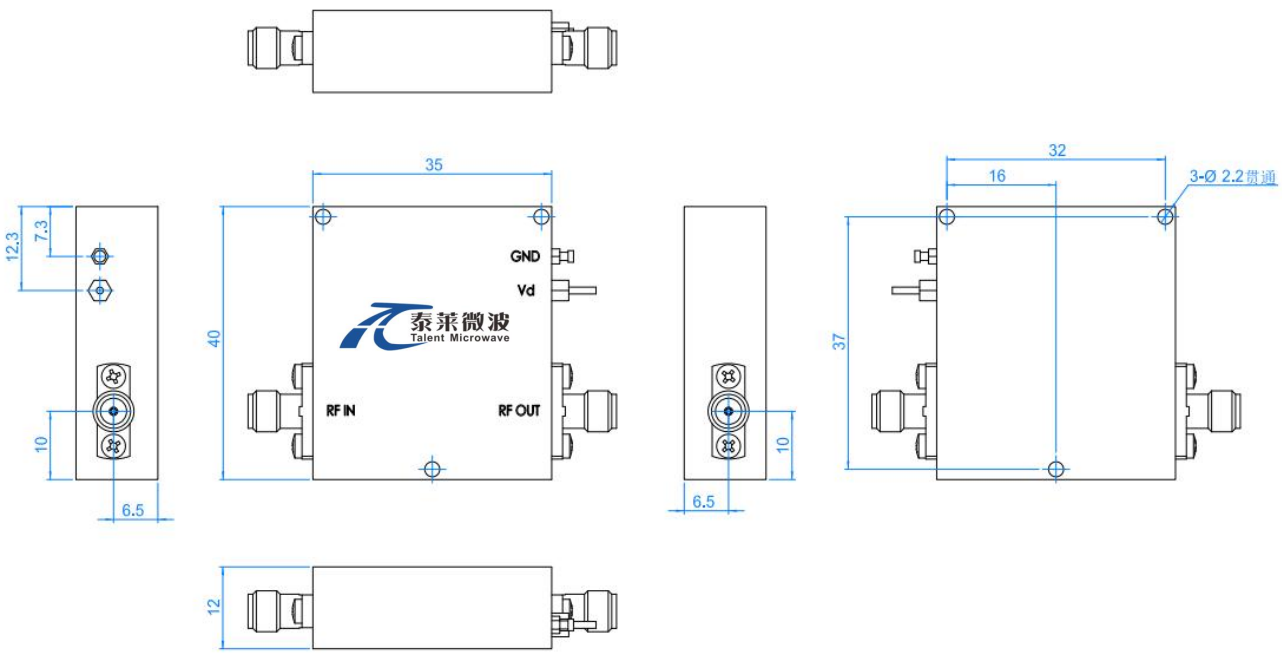
Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



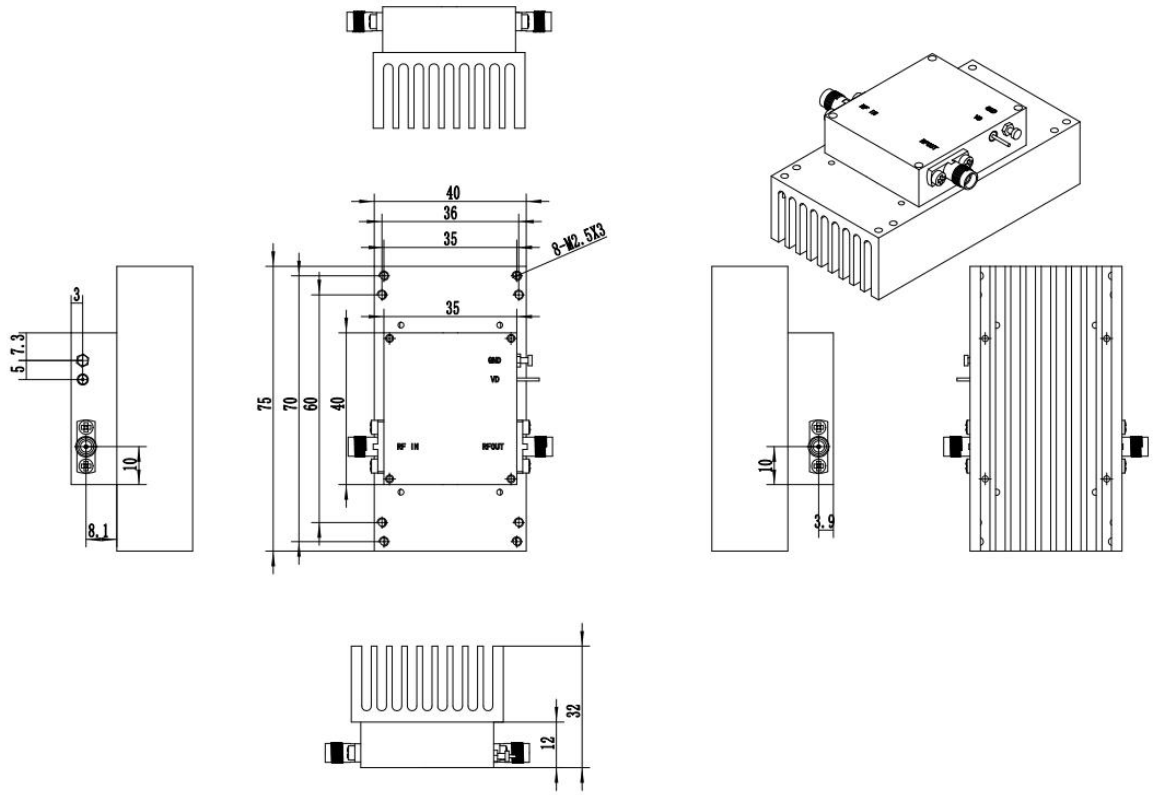
***Heat Sink Required During Operation

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

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Outline Drawing:

Unit:mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	℃
Non-operating Temperature	-55		+125	℃
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
TLLA0.1G50G-27-50	Low Noise Amplifier, 0.1-50GHz, Noise Figure:5.0dB, Gain: 27dB,P1dB:13dBm,+8V DC,Without Heatsink	Rev.1.1
TLLA0.1G50G-27-50-HS	Low Noise Amplifier, 0.1-50GHz, Noise Figure:5.0dB, Gain: 27dB,P1dB:13dBm,+8V DC,With Heatsink	Rev.1.1