

Model: TLLA10M40G-30-30
Low Noise Amplifier
0.01-18GHz, NF:3.0dB, Gain:30dB, P1dB:21dBm
18-40GHz, NF:5.5dB, Gain:29dB, P1dB:19dBm
Feature:

- Ultra Wide Band: 0.01-40GHz
- Gain: 30dB Typ@0.01-18GHz
- Noise Figure: 3.0dB Typ@0.01-18GHz
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Min	Typ	Max	Units
Frequency range	0.01-18		18-40				GHz
Gain	25	30		24	29		dB
Gain Flatness		±3			±2.5		dB
Noise Figure		3			5.5		dB
Output P1dB	18	21		16	19		dBm
Output Psat		23			21		dBm
Output IP3		31			28		dBm
Input VSWR		1.8			2		:1
Output VSWR		1.8			2		:1
DC Voltage	12						V DC
DC Supply Current			350	400		mA	
Impedance	50						Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	30*48*12(Without Heatsink) 30*92*27(With Heatsink)	mm
Weight	40	g

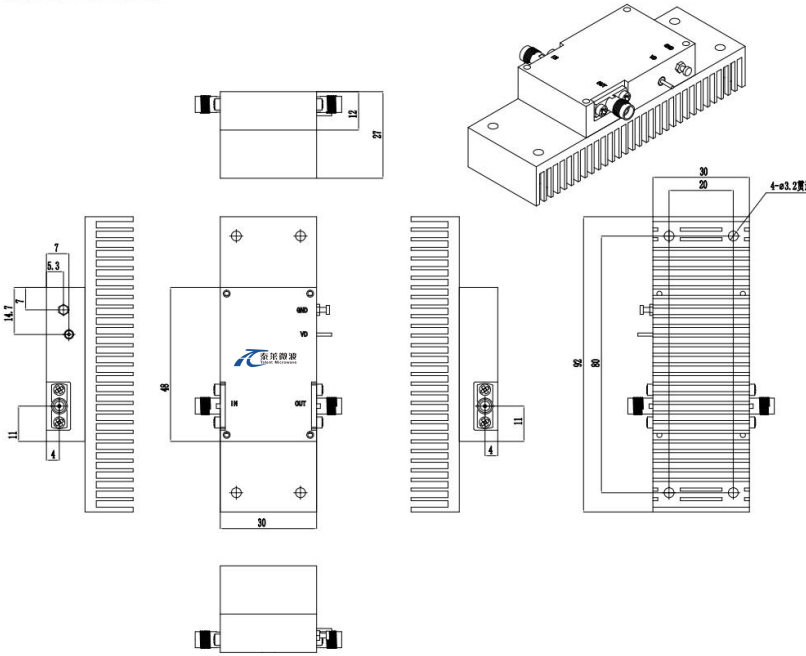
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15V
RF Input Power	2 dBm
ESD sensitivity (HBm)	Class 0, passed 150V


 Available 220V System
 Benchtop Amplifier

Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

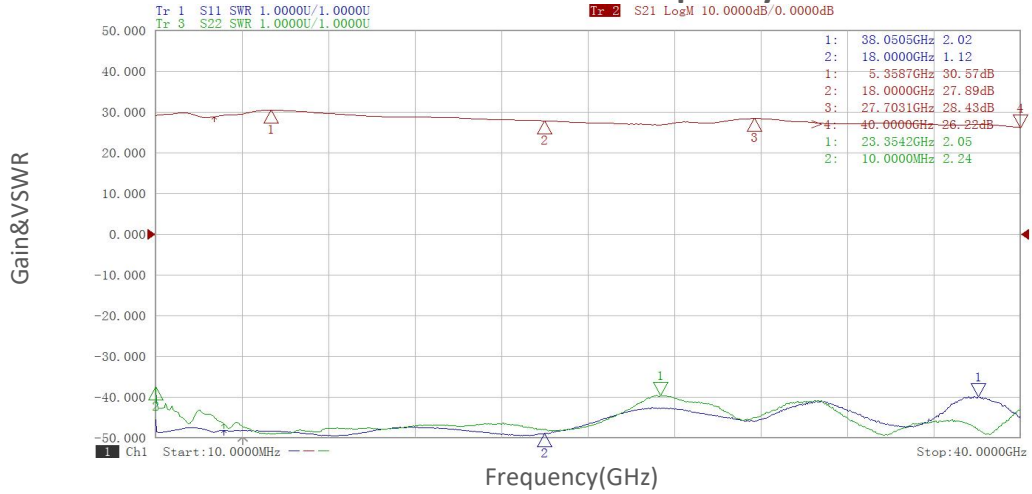
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

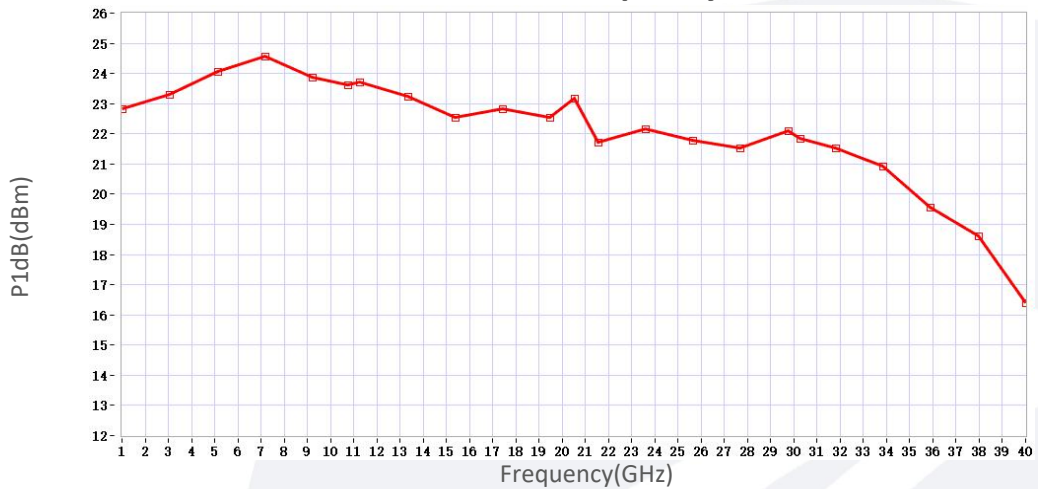
Part Number	Description	Revision
TLLA10M40G-30-30	Low Noise Amplifier, 0.01-18GHz, Noise Figure:3.0dB, Gain:30 dB,P1dB:21dBm,18-40GHz, Noise Figure:5.5dB, Gain:29 dB,P1dB:19dBm+12V DC,Without Heatsink	Rev.1.1

Typical Performance Data:

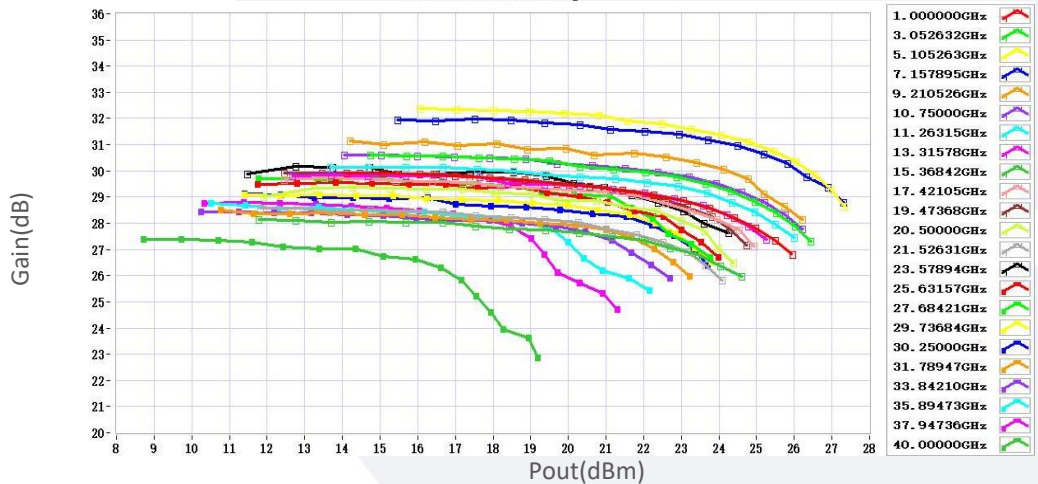
Gain&VSWR vs Frequency



P1dB vs Frequency



Gain vs Output Power



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.