

Model: TMLA-060090-3940-12
**Low Noise Amplifier
 60-90GHz, NF:4.0 dB, Gain:39 dB**
Feature:

- Ultra Wide Band: 60-90 GHz
- Gain: 39dB Typ
- Noise Figure: 4.0dB Typ
- Unconditional stability

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	60		90	GHz
Small Signal Gain		39		dB
Noise Figure		4	5	dB
Output P1dB		10		dBm
Output Psat		12		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+12		V DC
DC power supply		140		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*42*24	mm

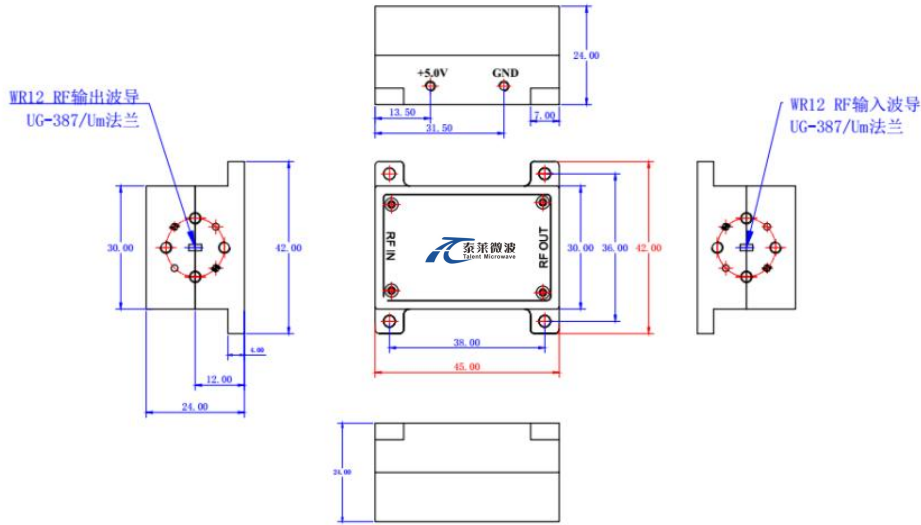
Absolute Maximum Ratings:

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


**Available 220V System
 Benchtop Amplifier**

Outline Drawing:

Unit: mm



Environmental Conditions:



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

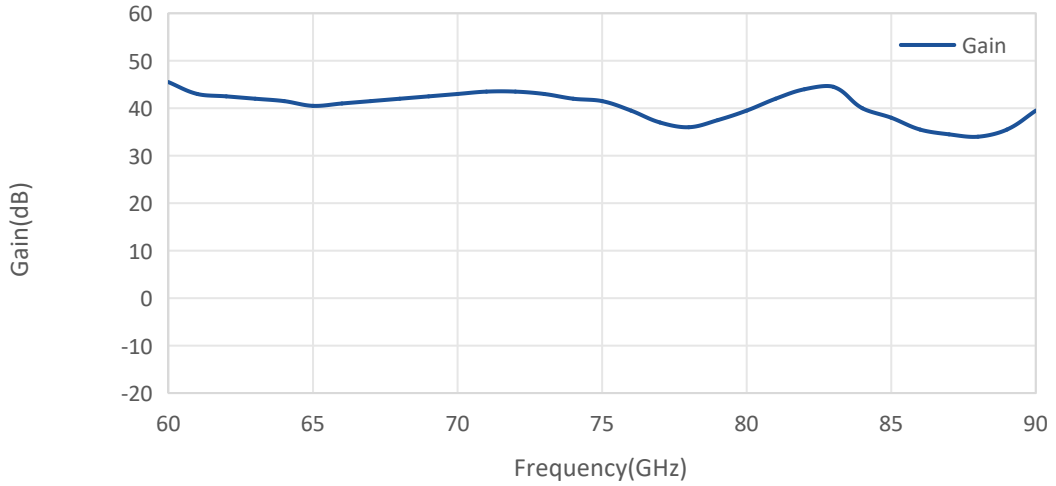
Parameter	Min	Typ	Max	Units
Operating Temperature	-25		+65	°C
Non-operating Temperature	-45		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

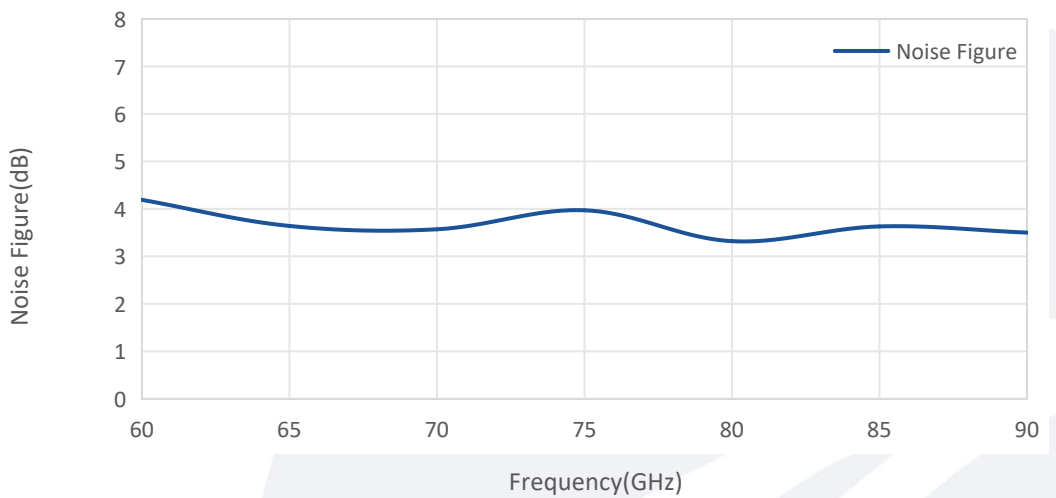
Part Number	Description	Revision
TMLA-060090-3940-12	Low Noise Amplifier,60-90GHz, Noise Figure:4.0dB, Gain:39dB,+12V DC,WR-12	Rev.1.1

Typical Performance Data:

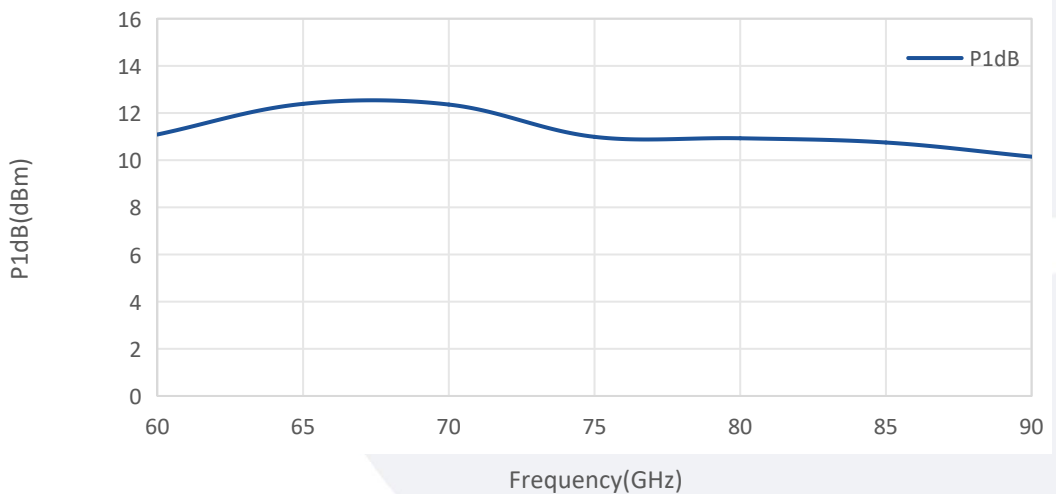
Gain vs Frequency



Noise Figure vs Frequency



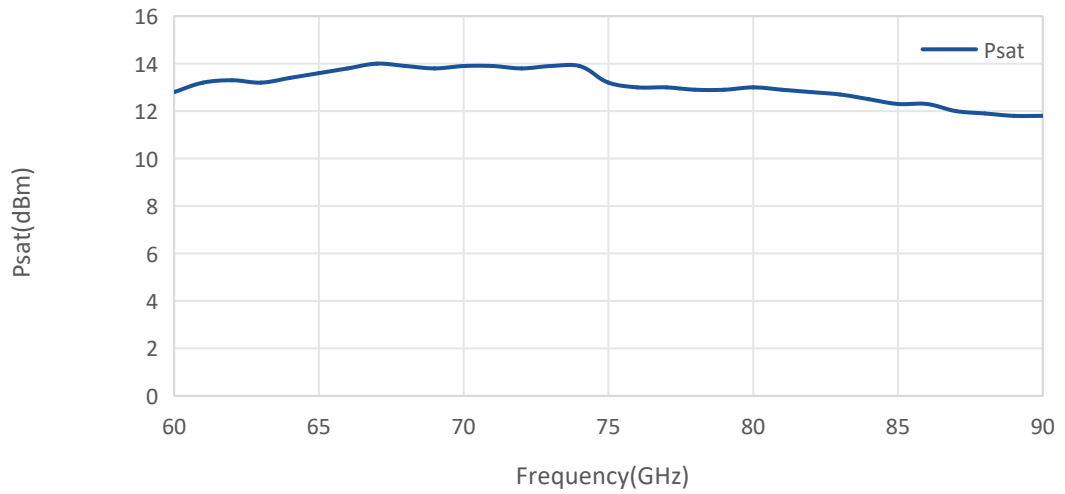
P1dB vs Frequency



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.

Typical Performance Data:

Psat vs Frequency



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