

# LOW NOISE AMPLIFIER

**MLN0560.37**  
**0.5GHz-6.0GHz**

## Features

- ✓ Broad band operation from 0.5 GHz to 6.0 GHz
- ✓ Low VSWR, unconditional stable
- ✓ SMA female connector I/O.
- ✓ Single DC power supply, internal voltage regulator, operating voltage from +12V to +18V
- ✓ Operating temperature -45~+85°C, storage temperature -55~+125°C

## Specifications

Parameters	Minimum	Typical	Maximum
Frequency Range	0.5GHz		6.0GHz
Gain	35 dB	37 dB	
Gain Flatness		±1.0 dB	±1.5 dB
Input VSWER		1.8	2.2
Output VSWR		1.5	2.0
P1dB	15dBm	16dBm	
Noise Figure		1.4dB	1.8dB
Output IP3		35dBm	
RF Input Power (no damage)			-10 dBm
DC Current (Vcc=+12V)		120mA	160mA
Impedance		50Ω	
Material	Aluminium \ Gold Painting		
Weight	80g		
RF In/Out connectors	SMA female		

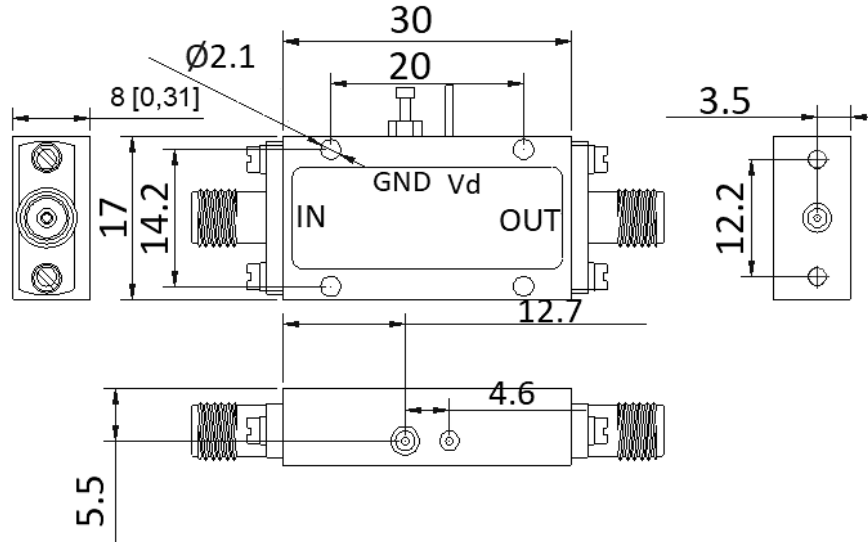
NOTES:

1. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
2. CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY



Tolerance:  $\pm 0.3\text{mm}$

### Mechanical Structure (mm):



**\*Heat Sink required during operation**

**\*Electrostatic Sensitive Devices**

### Absolute Maximum Ratings

Supply Bias Voltage	+18V
RF Input Power	-10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

### Environmental Conditions

Storage Temperature	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Operating Temperature	$-45^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Shock	20G for 11msc half sin wave, 3 axis both directions
Humidity	100% RH at 35c, 95%RH at 40°C

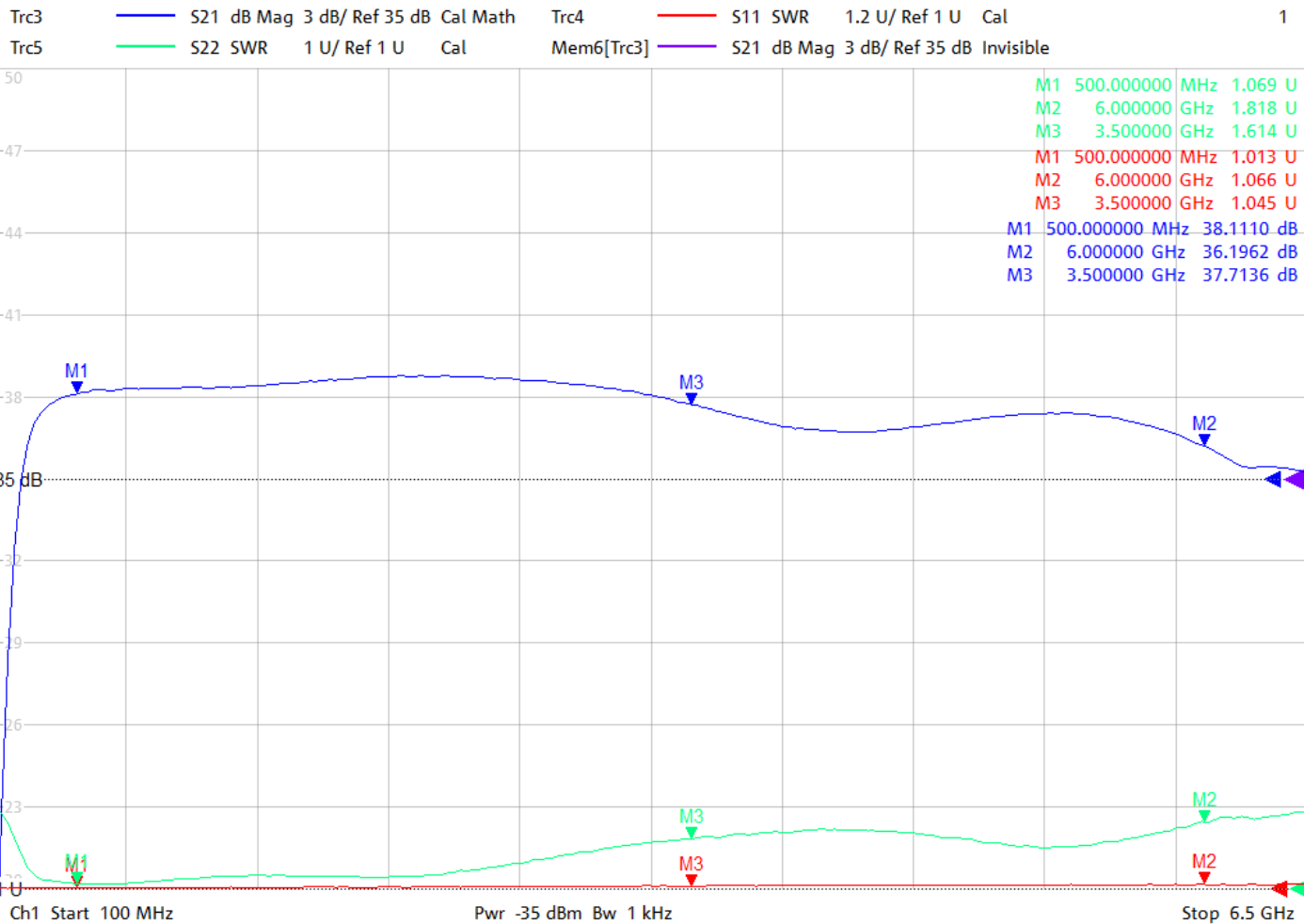
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## Typical Test Report

SPEC	Gain	Gain Flatness	Input VSWR	Ouput VSWR	NF	P-1	Input Max Power	Output Ip3
		$\geq 35\text{dB}$	$\leq 1.5$	2.2	2.0	$\leq 1.8\text{dB}$	$\geq 15\text{ dB}$	$\leq -10\text{dBm}$
Test data	36.1	1.45	2.03	1.81	1.5dB	16dBm	-10dBm	29dBm

5/27/2022 9:22:20 AM  
1311.6010K64-101466-va



5/27/2022 9:23:02 AM  
1311.6010K64-101466-va

Trc3 S21 dB Mag 3 dB/ Ref 35 dB Cal Math  
Trc5 S22 SWR 1 U/ Ref 1 U Cal

Trc4 S11 SWR 1.2 U/ Ref 1 U Cal  
Mem6[Trc3] S21 dB Mag 3 dB/ Ref 35 dB Invisible

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