

Model: TMLA-040060-4550-19-N

Low Noise Amplifier
40-60GHz, NF:4.0 dB, Gain:43 dB

Feature:

- Ultra Wide Band: 40-60 GHz
- Gain: 43dB Typ
- Noise Figure: 4.0dB Typ
- Unconditional stability

Electrical Specifications:

| Parameter | Min | Typ | Max | Units |
|-----------------|-----|-----|-----|-------|
| Frequency range | 40 | | 60 | GHz |
| Gain | | 43 | | dB |
| Noise Figure | | 4.0 | | dB |
| Input VSWR | | 2 | | :1 |
| Output VSWR | | 1.5 | | :1 |
| DC Voltage | | +12 | | V DC |
| DC power supply | | 220 | | mA |

Mechanical Specifications:

| Parameter | Value | Units |
|------------------|-----------------|-------|
| Input Connector | WR-19/ UG-383/U | |
| Output Connector | WR-19/ UG-383/U | |
| Power Supply Pin | Solder Pin | |
| Size | 45*30*30 | mm |

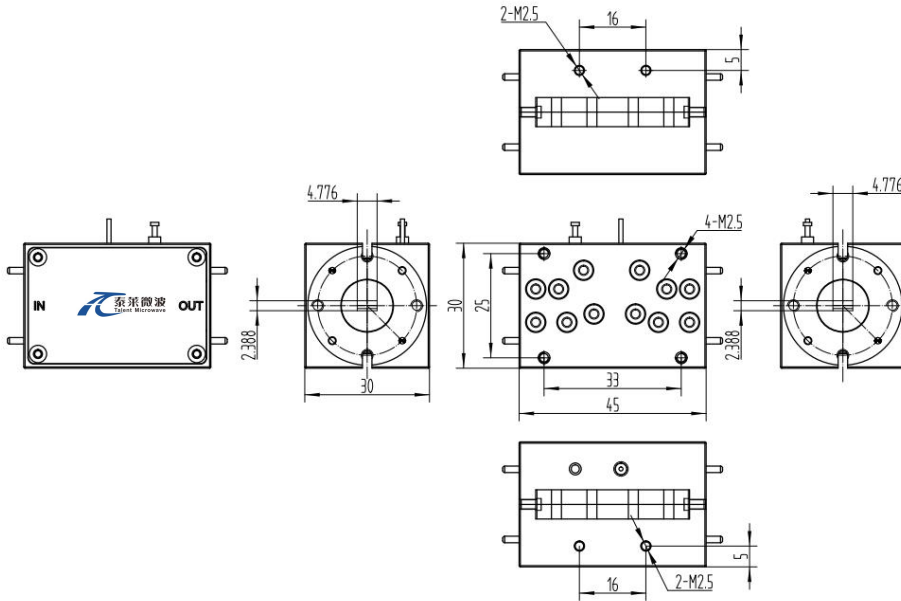
Absolute Maximum Ratings:

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



Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

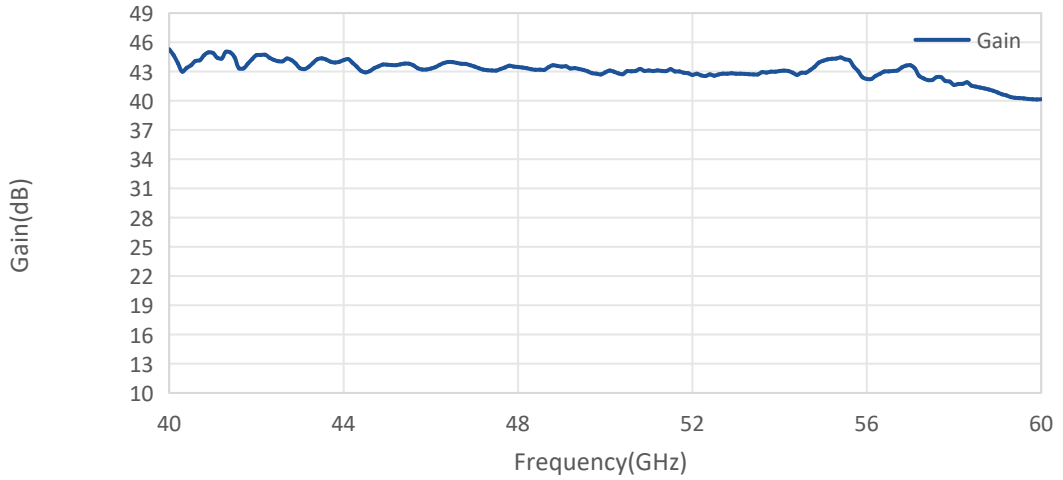
| Parameter | Min | Typ | Max | Units |
|---------------------------------|---|--------|-----|-------|
| Operating Temperature | -40 | | +75 | °C |
| Non-operating Temperature | -55 | | +85 | °C |
| Relative humidity | | 95 | | % |
| Altitude | | 10,000 | | feet |
| Shock / Vibration(MIL-STD-810F) | 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:

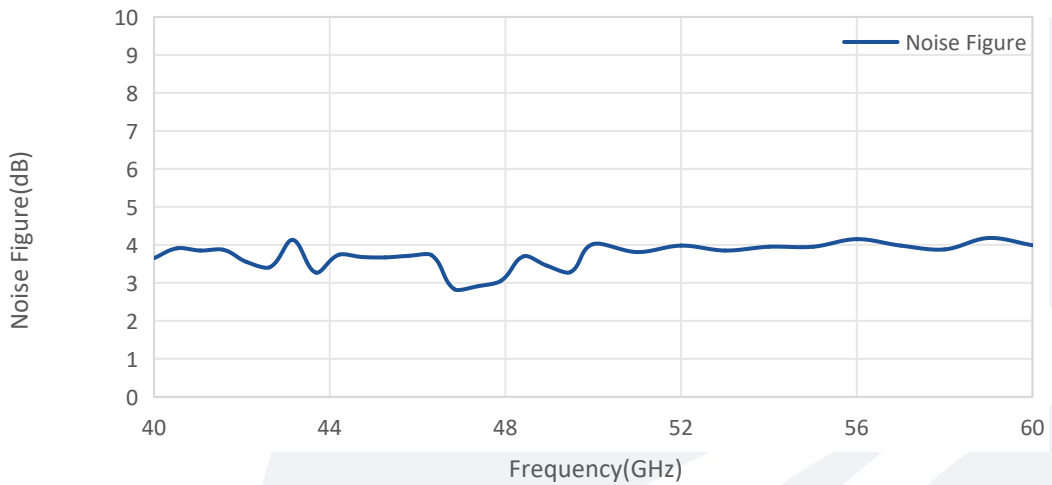
| Part Number | Description | Revision |
|-----------------------|---|----------|
| TMLA-040060-4550-19-N | Low Noise Amplifier,40-60GHz, Noise Figure:4.0dB, Gain:43dB,+12V DC,WR-19 | Rev.1.1 |

Typical Performance Data:

Gain vs Frequency



Noise Figure 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.