

Model:TLPA10M1G-33-33
Power Amplifier
10MHz-1GHz, Gain:33dB, Psat:33dBm
Feature:

- Ultra Wide Band: 10MHz-1GHz
- Gain: 33dB Min
- Psat Output Power: 33 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

| Parameter | Min | Typ | Max | Units |
|----------------------|--------|-----|-----|-------|
| Frequency range | 0.01-1 | | | GHz |
| Gain | 33 | 35 | | dB |
| Gain Flatness | | ±2 | ±3 | dB |
| Output Psat | 33 | 34 | | dBm |
| Harmonics@Pout=33dBm | | -15 | | dBc |
| Input VSWR | | 1.5 | 2 | :1 |
| DC Voltage | | 15 | 16 | V DC |
| DC Supply Current | | 0.2 | 1 | A |
| Impedance | 50 | | | Ohms |

Mechanical Specifications:

| Parameter | Value | Units |
|-------------------------|------------|-------|
| Input /Output Connector | SMA Female | |
| DC Bias | Solder Pin | |
| Size | 76*48*15 | mm |
| Weight | 150 | g |

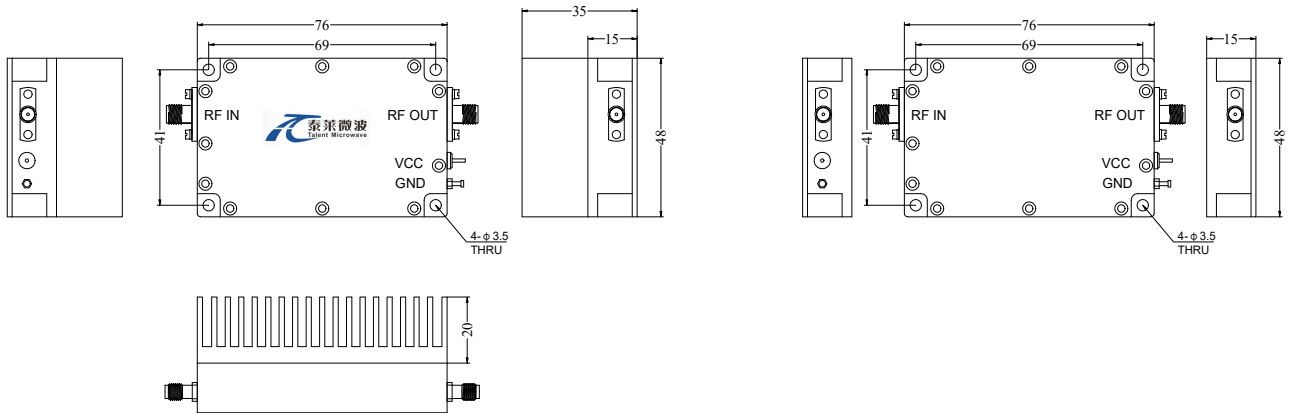
Absolute Maximum Ratings:

| Parameter | Value |
|-----------------------|----------------------|
| Supply Bias Voltage | 16 V |
| RF Input Power | 5 dBm |
| ESD sensitivity (HBm) | Class 0, passed 150V |


 Available 220V System
 Benchtop Amplifier

Outline Drawing:

Unit: mm



*****Heat Sink Required During Operation**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

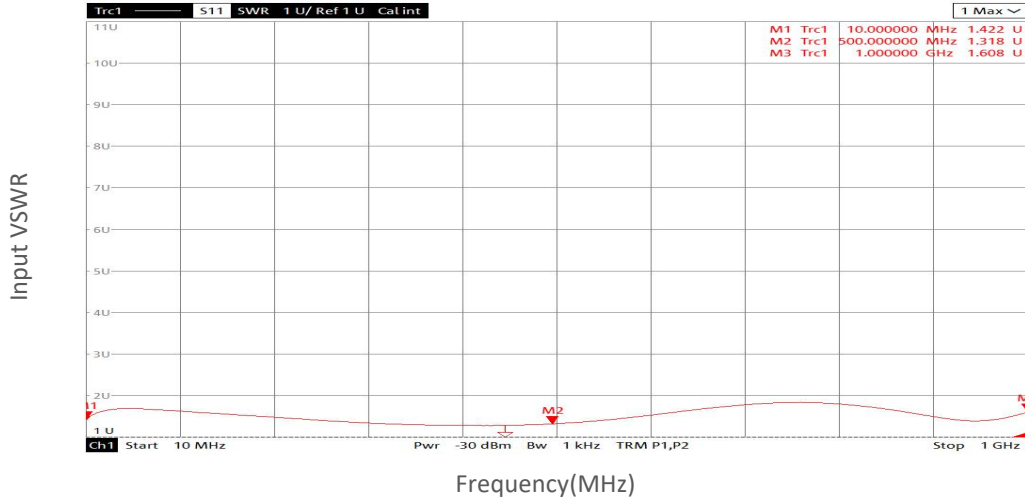
| Parameter | Min | Typ | Max | Units |
|---------------------------------|---|-----|------|-------|
| Operating Temperature | -45 | | +85 | °C |
| Non-operating Temperature | -55 | | +125 | °C |
| Relative humidity | | 95 | | % |
| Altitude | 30,000 | | | feet |
| Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis | | | |
| Shock(non operating) | 20G for 11msc half sin wave,3 axis both directions | | | |

Ordering Information:

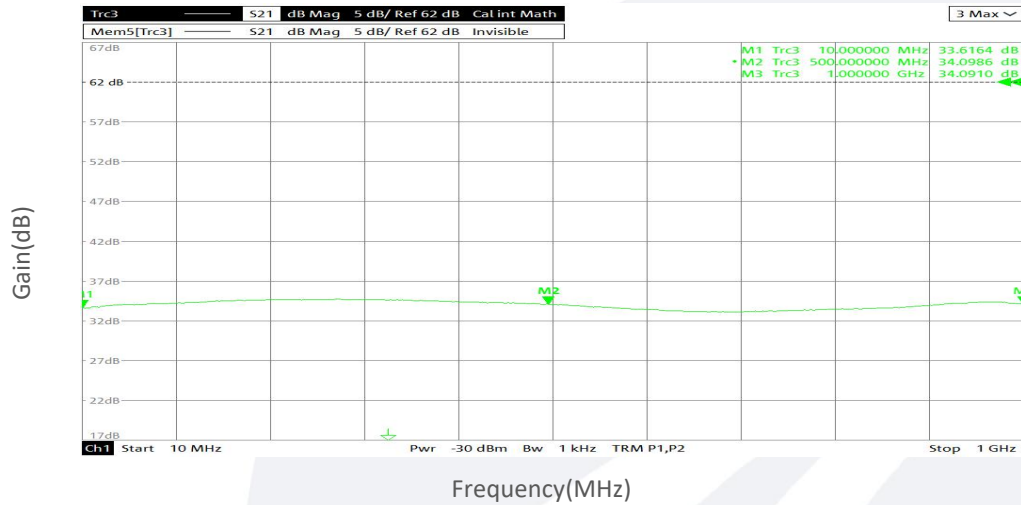
| Part Number | Description | Revision |
|--------------------|--|----------|
| TLPA10M1G-33-33 | Power amplifier 10MHz-1GHz,Gain:33dB,Psat:33dBm,15V DC, Without Heatsink | Rev.1.0 |
| TLPA10M1G-33-33-HS | Power amplifier 10MHz-1GHz,Gain:33dB,Psat:33dBm,15V DC, With Heatsink | Rev.1.0 |

Typical Performance Data:

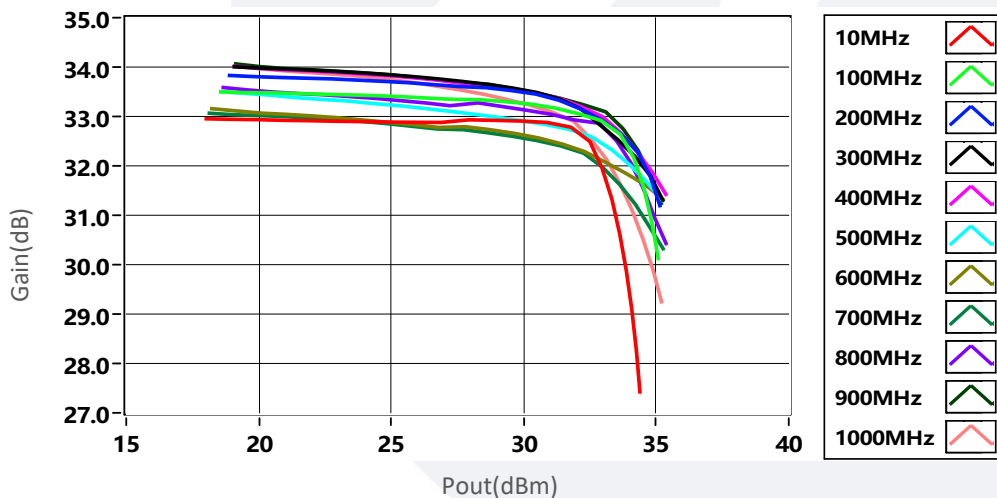
Input VSWR vs Frequency



Gain vs Frequency

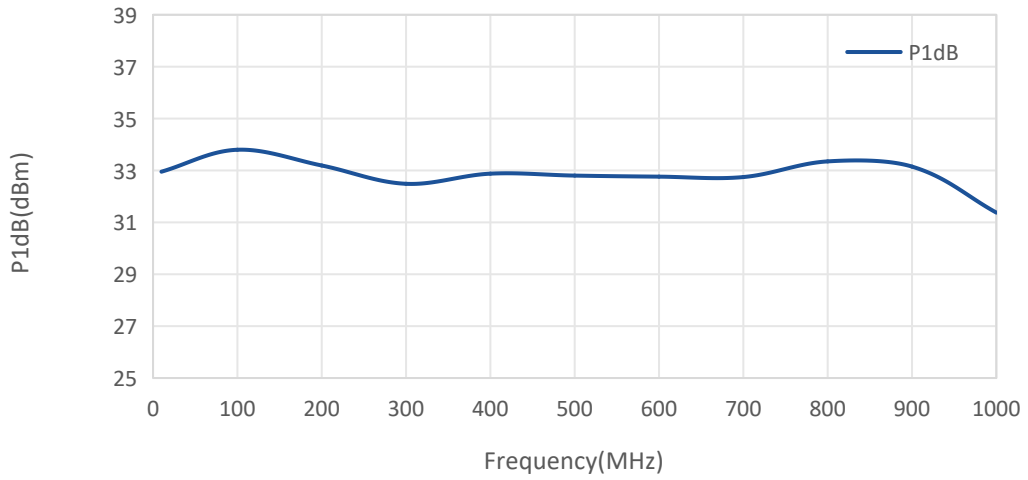


Gain vs Output Power

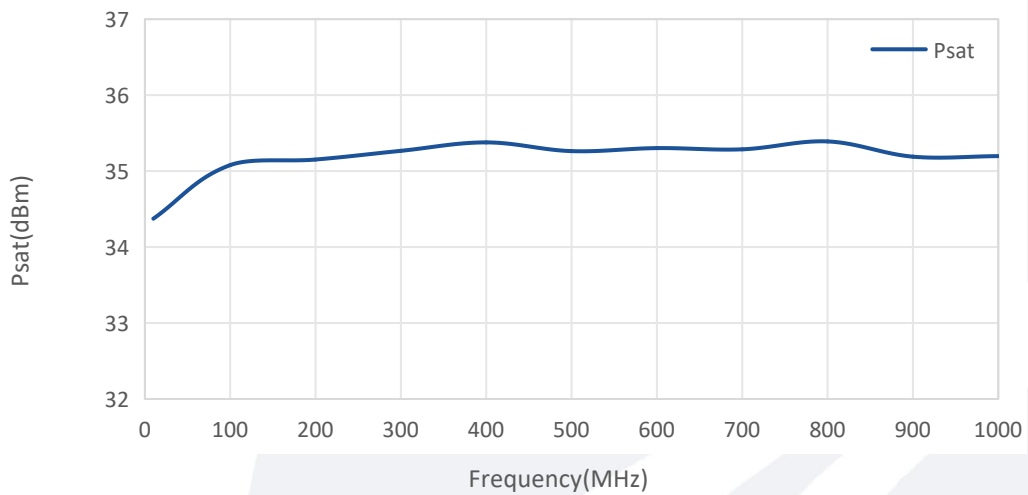


Typical Performance Data:

P1dB vs Frequency



Psat vs Frequency



Harmonics vs Frequency

