

## Low Noise Amplifier

10-67GHz/5.0dB NF/30dB Gain/13dBm P1dB

Model: TLLA10G67G-30-50

TLLA10G67G-30-50 is a low noise amplifier with a typical small signal gain of 30 dB and a nominal noise figure of 5.0 dB across the frequency range of 10 to 67 GHz. The DC power requirement for the amplifier is +12 V DC/300 mA. The input and output port configuration offers coax adapter structure with 1.85mm female.

### Features:

- Frequency range: 10-67GHz
- Gain: 30dB Typ
- Noise Figure: 5.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Applications:

- Communication systems

### Electrical Characteristics:

| Parameter         | Min | Typ | Max | Units |
|-------------------|-----|-----|-----|-------|
| Frequency range   | 10  |     | 67  | GHz   |
| Small Signal Gain | 28  | 30  |     | dB    |
| Gain Flatness     |     | ±3  |     | dB    |
| Noise Figure      |     | 5   | 8   | dB    |
| Output P1dB       |     | 13  |     | dBm   |
| Output IP3        |     | 25  |     | dBm   |
| Input VSWR        |     | 2   |     | :1    |
| Output VSWR       |     | 2   |     | :1    |
| DC Voltage        |     | +12 | +13 | V DC  |
| DC Supply Current |     | 300 |     | mA    |
| Impedance         |     | 50  |     | Ohms  |

### Mechanical Specifications:

| Parameter               | Value                      | Units |
|-------------------------|----------------------------|-------|
| Input /Output Connector | 1.85mm Female/1.85mmFemale |       |
| DC Bias                 | Solder Pin                 |       |
| Size                    | 35*40*12                   | mm    |

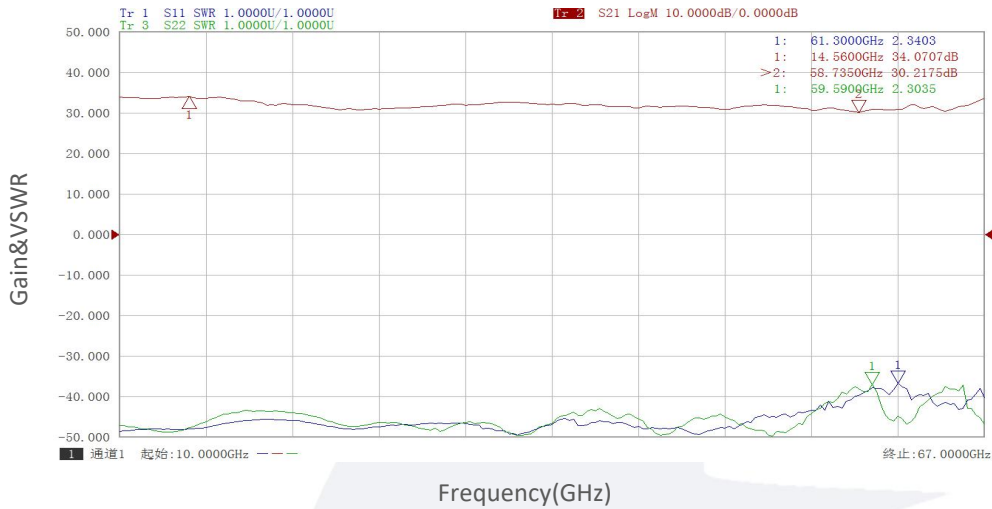


### Ordering Information:

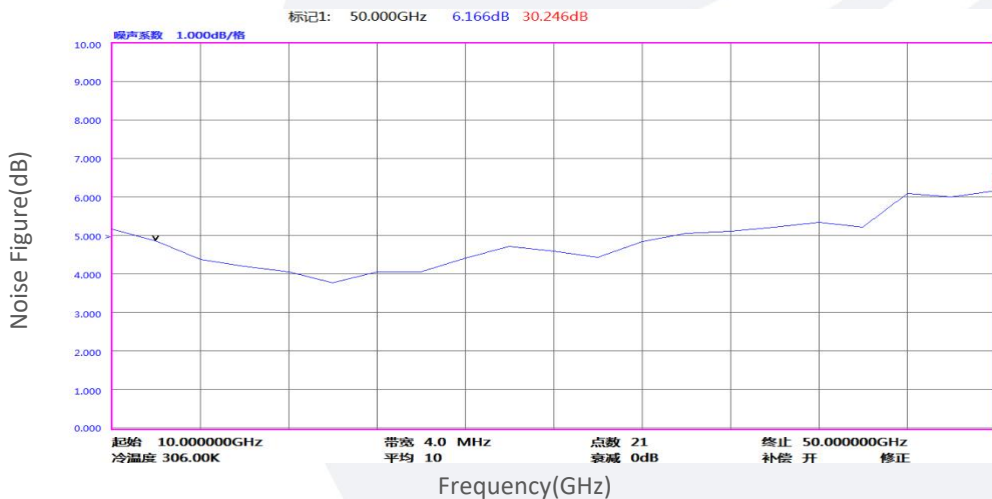
| Base Number         | Description  | Revision |
|---------------------|--|----------|
| TLLA10G67G-30-50    | Low Noise Amplifier, 10-67GHz, Noise Figure:5.0dB, Gain:30dB,P1dB:13dBm,+12V DC,Without Heatsink | Rev.1.2  |
| TLLA10G67G-30-50-HS | Low Noise Amplifier, 10-67GHz, Noise Figure:5.0dB, Gain:30dB,P1dB:13dBm,+12V DC,With Heatsink    | Rev.1.2  |

### Typical Performance Data:

#### Gain&VSWR vs Frequency



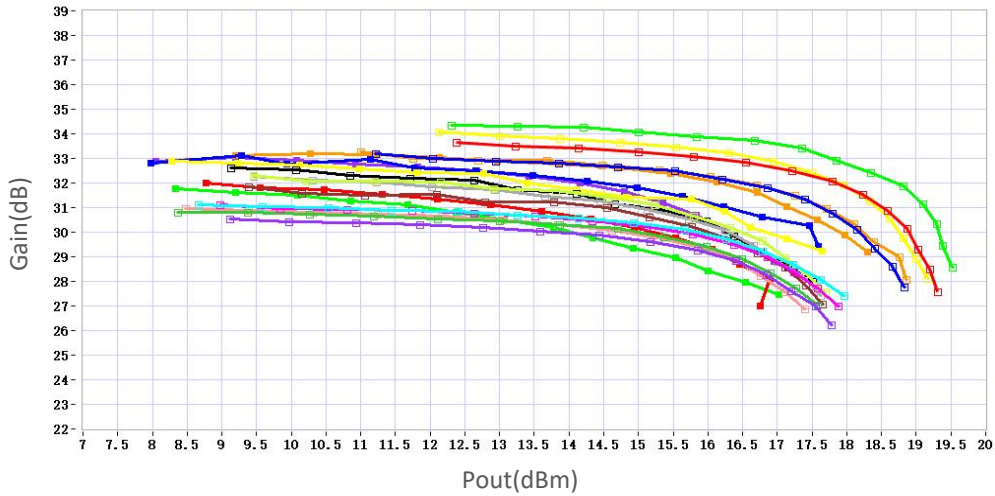
#### Noise Figure vs Frequency



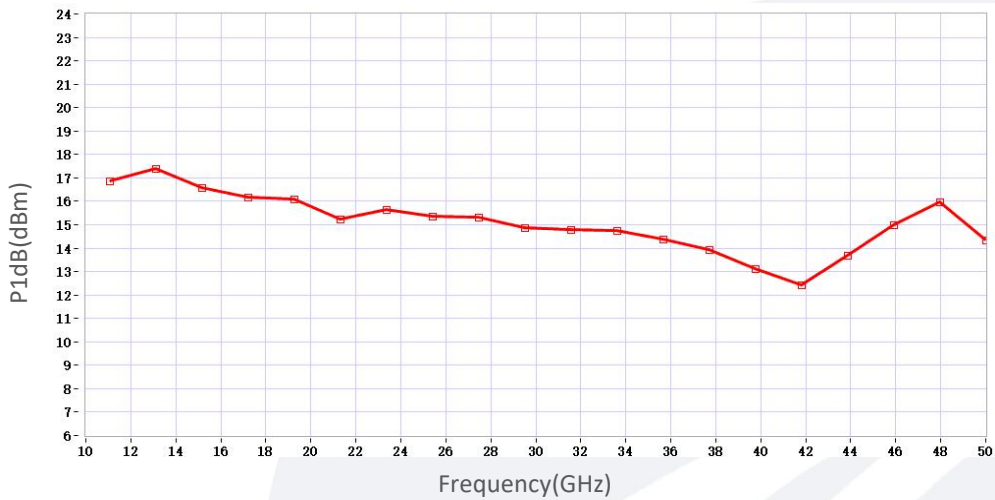
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

## Typical Performance Data:

### Gain vs Output Power



### 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.