

50Ω Wideband 600 MHz to 6 GHz, Flat Gain LNA

Case PN: 6UED2W6H41SMAP2

Features:

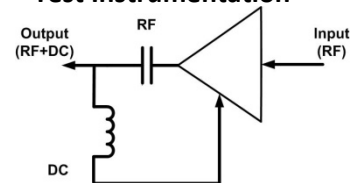
- * Frequency Range: 600 MHz to 6 GHz;
- * Noise Figure: typical 0.95 dB @ 5.5 GHz
- * Gain: 21 dB Gain at 5.5 GHz
- * Output P1dB: +19 dBm CW
- * +35.5 dBm OIP3 at 65mA current
- * +3.3 to +5V Supply (+5V recommended)
- * Stainless Steel SMA Female Connector
- * High Quality Isola-Tera RF PCB
(very low loss and high thermal performance)
- * ROHS Compliant

Product Overview:

LNA600M6GFGBT is a flat gain, high-linearity, ultra low noise amplifier in a small 1-1/8"x15/16"x0.48" shielded RF enclosure. The LNA provides a 2dB flat gain (peak-to-peak) from 3 to 6 GHz. At 5.5 GHz, the amplifier typically provides 21 dB gain, +35.5 dBm OIP3 at a 56 mA bias setting, and 0.95 dB noise figure. The LNA can be biased from a single supply +3.3V to +5V. The DC power is fed through output SMA connector. It combines Bias Tee and LNA in one with DC Power via RF output port.

Applications:

- * 4.5G, 5G Massive MIMO
- * Repeaters/DAS
- * Mobile Infrastructure
- * LTE/WCDMA/CDMA/GSM
- * SDR & Ham Radio
- * Test Instrumentation

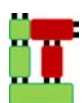


Electrical Specifications:

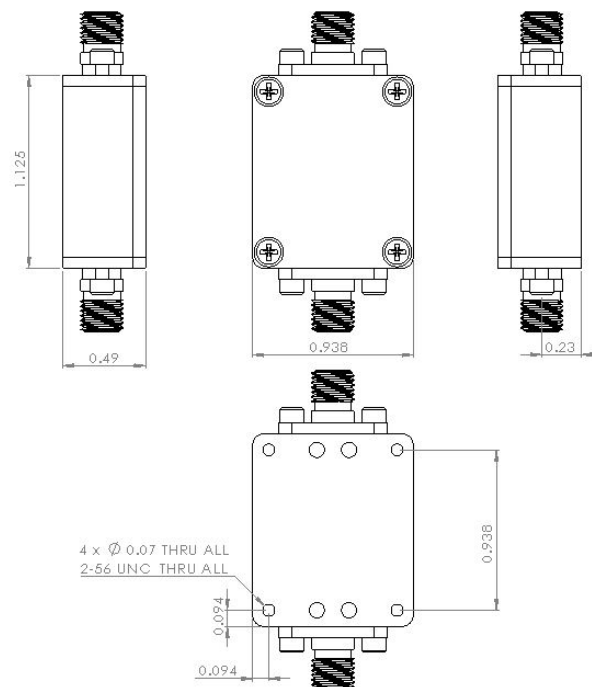
| Item | Parameter | Condition | Electrical Specification | | | |
|------|-------------------------------|---------------------------|--------------------------|-------|------|-------|
| | | | MIN | TYP | MAX | UNITS |
| 1 | Operational Frequency Range | | 600 | | 6000 | MHz |
| 2 | Test Frequency | | | 5500 | | MHz |
| 3 | Gain | | 18 | 21 | 22 | dB |
| 4 | Input Return Loss | | | 10 | | dB |
| 5 | Output Return Loss | | | 9 | | dB |
| 6 | Noise Figure | | | 0.95 | 1.3 | dB |
| 7 | Output P1dB | | | +19 | | dBm |
| 8 | Output IP3 | Pout=+5 dBm/tone, Δf=1MHz | +30 | +35.5 | | dBm |
| 9 | Operating Current (Quiescent) | | | 56 | | mA |

Absolute Maximum Ratings

| Item | Parameter | Rating | UNITS |
|------|----------------------------------|-------------|-------|
| 1 | Max Device Voltage | +7 | V |
| 2 | Max Input Power, CW, 50Ω, T=25°C | +30 | dBm |
| 3 | Operating Temperature | -40 to +85 | °C |
| 4 | Max Storage Temperature | -65 to +150 | °C |



Outline Drawing (inch)



S-Parameters

