

50Ω Wide Band, Low Noise, Flat Gain LNA

Case PN: 6UDE2W6S1A2

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
- * +5 to +15V Supply
- * Stainless Steel SMA Female Connector
- * High Quality RO4350 RF PCB
(very low loss and high thermal performance)
- * ROHS Compliant

General Description:

LNA600M6GFGR is a flat gain, high-linearity, ultra low noise amplifier in a small 15/16"x1-1/8"x0.59" shielded RF enclosure (PN: 6UDE2W6S1A2). It has integrated LDO Linear Regulator with industrial leading low noise (11 μ v rms). 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 +5V to +15V. It can be powered by wide categories of power supplies (e.g., USB, Car Battery etc.).

Applications:

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

**Electrical Specifications:**

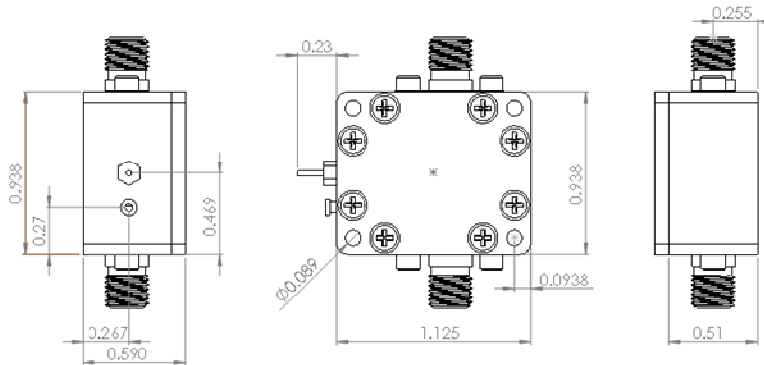
Item	Parameter	Condition	Electrical Specification			
			MIN	TYP	MAX	UNITS
1	Operational Frequency Range		600		6000	MHz
2	Test Frequency			5500		MHz
3	Gain		18	21	22	dB
4	Input Return Loss			10		dB
5	Output Return Loss			9		dB
6	Noise Figure			0.95	1.3	dB
7	Output P1dB			+19		dBm
8	Output IP3	Pout=+5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

Absolute Maximum Ratings

Item	Parameter	Rating	UNITS
1	Max Device Voltage	+40	V
2	Max Input Power, CW, 50 Ω , T=25 $^{\circ}$ C	+30	dBm
3	Operating Temperature	-40 to +85	$^{\circ}$ C
4	Max Storage Temperature	-65 to +150	$^{\circ}$ C



Outline Drawing (inch)



S-Parameters

