

50Ω Low Noise, Flat Gain LNA

Case PN: 6UGD2W6S1A2

Features:

- * Frequency Range: 5250 MHz to 5455 MHz;
- * Noise Figure: typical 0.85 dB @ 5.35 GHz
- * Gain: 39 dB Gain at 5.35 GHz
- * Output P1dB: +19 dBm CW
- * +35.5 dBm OIP3 at 120mA 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

Applications:

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

General Description:

LNA5250M5455M is a flat gain, high-linearity, ultra low noise amplifier in a small 1-1/2"x15/16"x0.59" shielded RF enclosure (PN: 6UGD2W6S1A2). The LNA provides a 1dB flat gain (peak-to-peak) from 5250 to 5455 MHz. At 5.35 GHz, the amplifier typically provides 39 dB gain, +35.5 dBm OIP3 at a 120 mA bias setting, and 0.85 dB noise figure. The LNA can be biased from a single supply +5V.

Electrical Specifications:

Item	Parameter	Condition	Electrical Specification			
			MIN	TYP	MAX	UNITS
1	Operational Frequency Range		5250		5455	MHz
2	Test Frequency			5350		MHz
3	Gain		38.5	39.5	40.5	dB
4	Input Return Loss			10		dB
5	Output Return Loss			40		dB
6	Noise Figure			0.85	1.0	dB
7	Output P1dB			+19		dBm
8	Output IP3	Pout=+5 dBm/tone, Δf=1MHz	+30	+35.5		dBm
9	Operating Current (Quiescent)			120		mA

Absolute Maximum Ratings

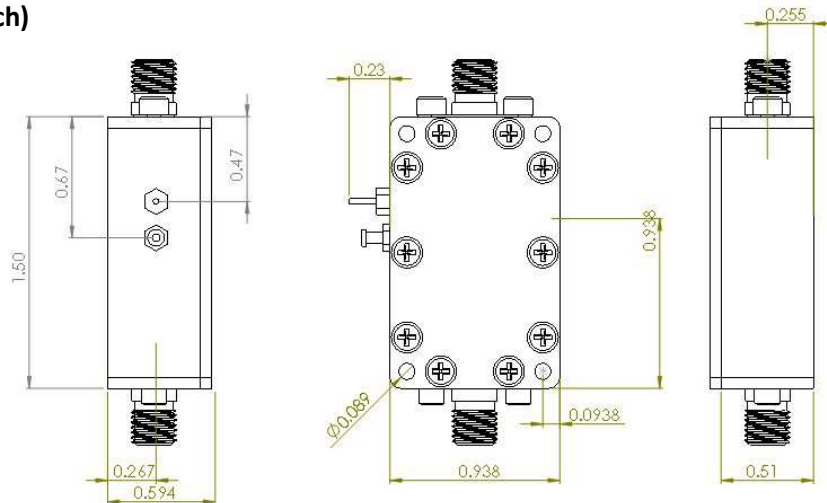
Item	Parameter	Rating	UNITS
1	Max Device Voltage	+7	V
2	Max Input Power, CW, 50Ω, T=25°C	+15	dBm
3	Operating Temperature	-40 to +85	°C
4	Max Storage Temperature	-65 to +150	°C



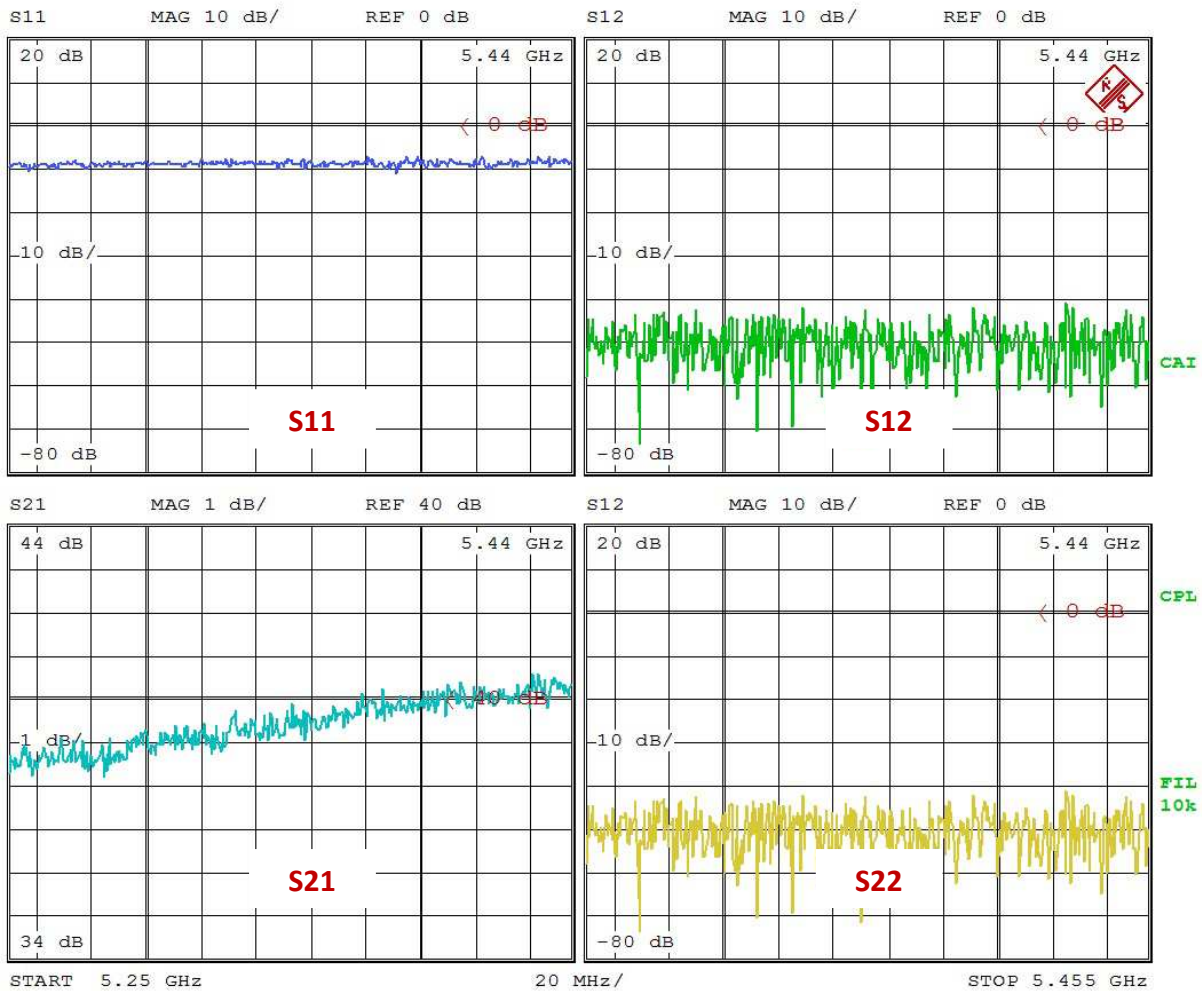
Coaxial
Low Noise Amplifier (LNA)

LNA5250M5455M

Outline Drawing (inch)



S-Parameters



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Rev. A LNA5250M5455M