

50Ω 50 to 500 MHz

Case PN: 6UED2W6S1A2

Features:

- * Frequency Range: 50 MHz to 500 MHz
- * Noise Figure: typical 1.0 dB @ 250MHz
- * Gain: 23 dB Gain at 250MHz
- * Output P1dB: +20 dBm CW
- * Output IP3: +36 dBm
- * DC Voltage: +5V
- * Operating Current: 85 mA
- * Stainless Steel SMA Female Connector
- * High Quality Isola-Tera RF PCB
(very low loss and high thermal performance)
- * ROHS Compliant

Applications:

- * Repeaters/DAS
- * Mobile Infrastructure
- * LTE/WCDMA/CDMA/GSM
- * General Purpose Wireless
- * SDR & Ham Radio
- * Test Instrumentation

Product Overview:

LNA700M6P0G is a high-linearity, ultra low noise amplifier in a small 15/16"x15/16"x0.59" shielded RF enclosure (PN: 6UDD2W6S1A2). At 250 MHz, the amplifier typically provides 23 dB gain, +36 dBm OIP3 at a 85 mA bias setting, and 1.0 dB noise figure. The LNA can be biased from a single supply +5V.

**Electrical Specifications:**

Item	Parameter	Conditions	Min	Typ	Max	Units
1	Operational Frequency Range		50		500	MHz
2	Test Frequency			250		MHz
3	Gain		21	23.0	24	dB
4	Input Return Loss			11		dB
5	Output Return Loss			11		dB
6	Noise Figure			1.0	1.2	dB
7	Output P1dB			+20		dBm
8	Output IP3	Pout = +3 dBm/tone, Δf = 1 MHz	+34	+36		dBm
9	Current, I _{DD}			85	100	mA

Test Conditions: V_{DD}=+5V, I_{dd} = 85 mA (typ.) Temp = +25 °C, 50Ω system.

Absolute Maximum Ratings

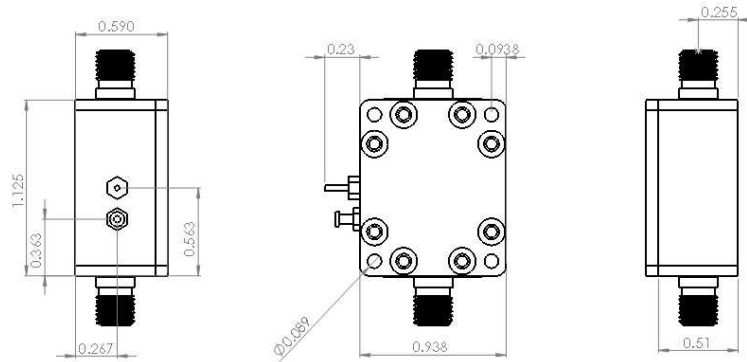
Item	Parameter	Rating	UNITS
1	Max Device Current	100	mA
2	Max Device Voltage	+7	V
3	Max RF input Power	+23	dBm
4	Operating Temperature	-40 to +85	°C
5	Max Storage Temperature	-65 to +150	°C



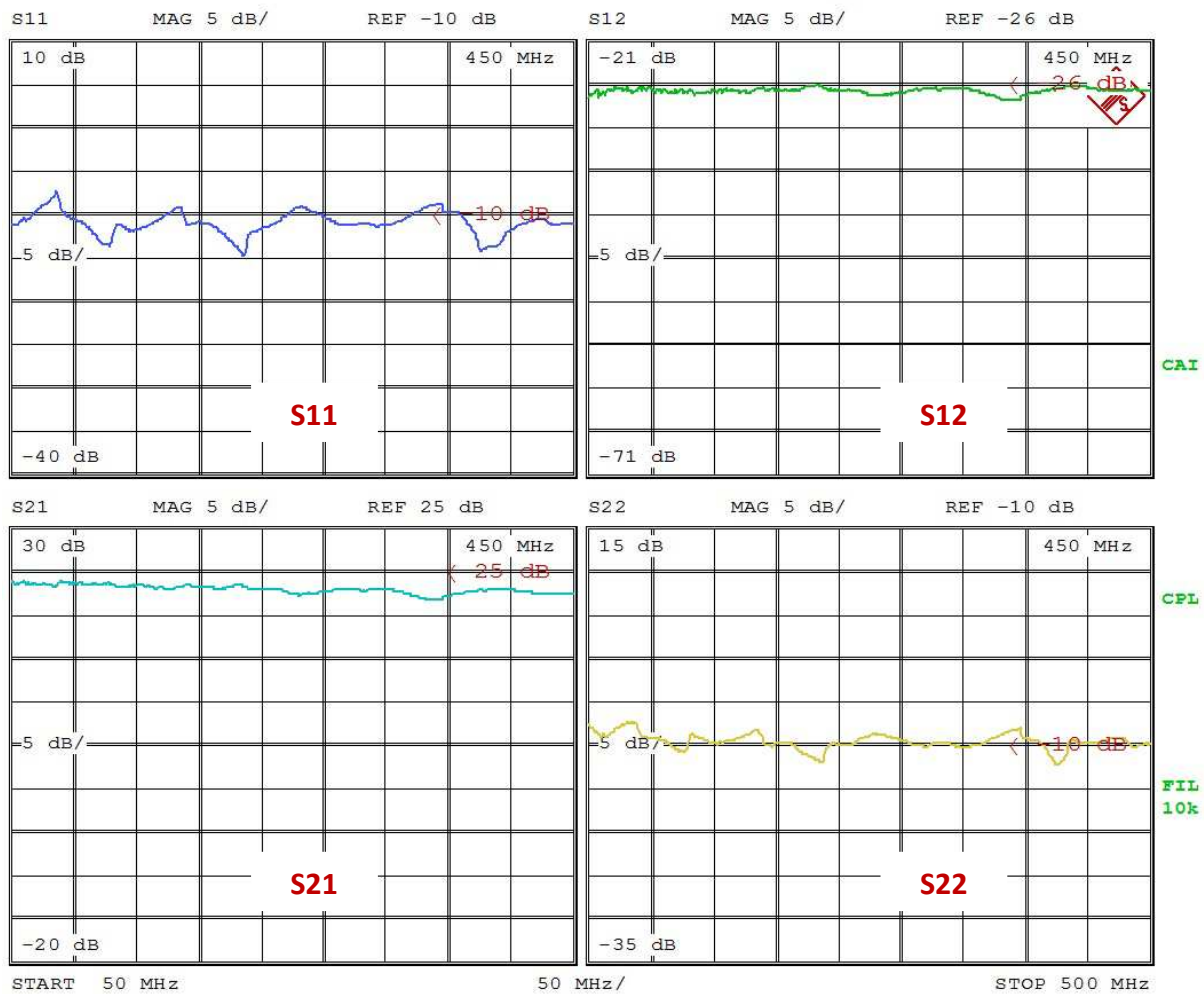
Coaxial
Ultra Low Noise Amplifier (LNA)

LNA50M500M

Outline Drawing (inch)



S-Parameters



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Rev. A LNA50M500M