

50Ω Wideband 500M to 4G Hz

Case PN: 6UED2W6S1A2

Features:

- * Frequency Range: 500 MHz to 4 GHz
- * Noise Figure: typical 0.4 dB @ 1.9 GHz
- * Gain: 20.6 dB Gain at 1.9 GHz
- * Output P1dB: +22 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:

LNA500M4G is a high-linearity, ultra low noise amplifier in a small 1-1/8"x15/16"x0.59" shielded RF enclosure (PN: 6UED2W6S1A2). At 1.9 GHz, the amplifier typically provides 20.6 dB gain, +36 dBm OIP3 at a 85 mA bias setting, and 1.3 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		500		4000	MHz
2	Test Frequency			1900		MHz
3	Gain		19	20.6	22	dB
4	Input Return Loss			16		dB
5	Output Return Loss			17		dB
6	Noise Figure			1.3		dB
7	Output P1dB			+20		dBm
8	Output IP3	Pout =+5 dBm/tone, Δf =1 MHz	+32.5	+36		dBm
9	Current, I _{DD}			85	100	mA

Test Conditions: V_{DD}=+5V, I_{dd} = 70 mA (typ.) Temp = +25 °C, 50Ω system.

Absolute Maximum Ratings

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



