

50Ω (match on input & output) Broadband 5G to 11G Hz

Case PN: 6UDD2W6S1A2

Features:

- * Frequency Range: 5GHz to 11GHz;
- * Low Noise Figure: typical 1.8dB
- * High Gain: 19.5 dB
- * Output P1dB: 16 dBm
- * Output IP3: 28 dBm
- * DC Voltage: +3.5V at 80mA
- * High Quality Rogers RO4350 RF PCB
(very low loss and high thermal performance)
- * ROHS Compliant

General Description:

LNA5G11G is a broadband, GaAs MMIC low noise amplifier with 20 dB typical gain from 5 to 11 GHz in a small 15/16"x15/16"x0.59" shielded RF enclosure (PN: 6UDD2W6S1A2). Its output 1dB compression point is +16dBm and third order linearity (OIP3) is typically 28 dBm. It has excellent Gain Flatness (+20dB Gain) between 5-11 GHz (+/-0.5dB).

Applications:

- * Test Instrumentation
- * Wideband A/D System
- * General Purpose Wireless
- * Radar & VSAT
- * SDR & Ham Radio



Electrical Specifications:

Item	Parameter	Conditions	Min	Typ	Max	Units
1	Operational Frequency Range		5		11	GHz
2	Gain		18	19.5		dB
3	Input Return Loss			12		dB
4	Output Return Loss			15		dB
5	Noise Figure			1.8	2.2	dB
6	Output P1dB			+16		dBm
7	Output IP3			+28		dBm
8	Current, I _{DD}			80	110	mA

Test Conditions: V_{DD}=+3.5V, I_{DD} = 80 mA (typ.) Temp = +25 °C, 50Ω system.

Absolute Maximum Ratings

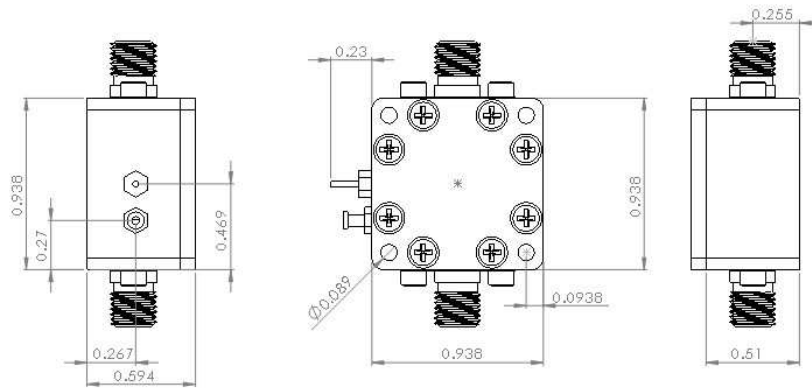
Item	Parameter	Rating	UNITS
1	Max Device Voltage	+4.5	V
2	Max RF input Power	+10	dBm
3	Operating Temperature	-40 to +85	°C
4	Max Storage Temperature	-65 to +150	°C



**Coaxial
Broadband Low Noise Amplifier (LNA)**

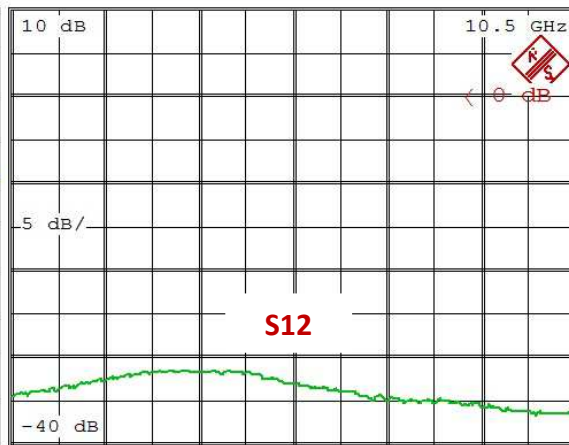
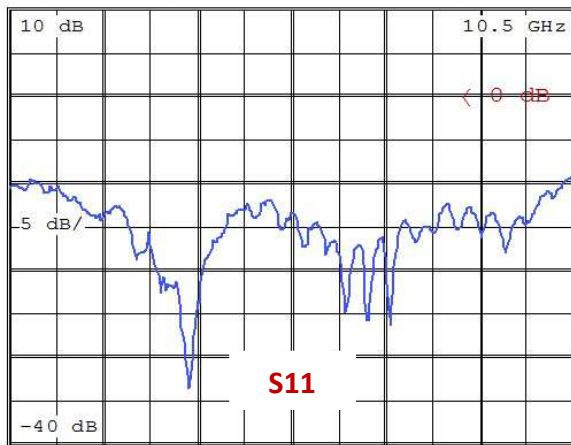
LNA5G11G

Outline Drawing (inch)



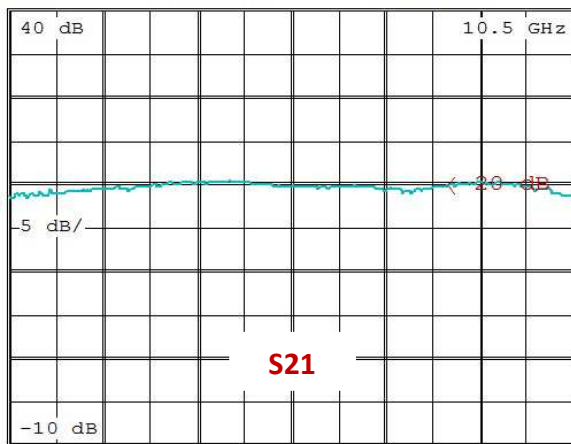
S-Parameters

S11 MAG 5 dB/

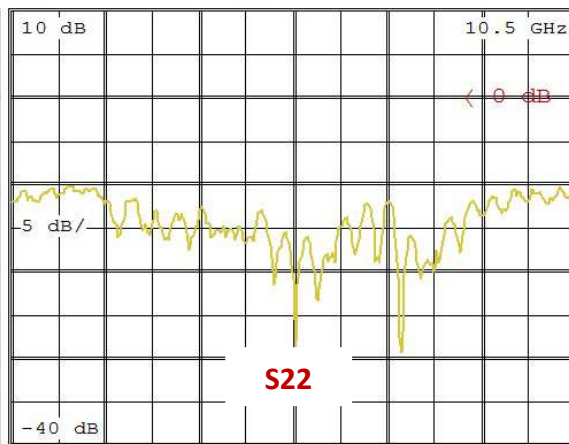


CAI

S21 MAG 5 dB/ REF 20 dB



S22 MAG 5 dB/ REF 0 dB



CPL

FIL 10k

START 5 GHz

500 MHz/

STOP 11 GHz

<https://cdn.shopify.com/s/files/1/1592/7469/files/LNA5G11G.pdf>



Lotus Communication Systems, Inc.

www.lotussys.com 588 Boston Post Rd., Weston, MA 02493 (888) 236-8588 sales@lotussys.com

Rev. A LNA5G11G