

## 50Ω (match on input &amp; output) Broadband 7G to 14G Hz

Case PN: 6UDD2W6S1A2

## Features:

- \* Frequency Range: 7GHz to 14GHz;
- \* Noise Figure: typical 1.8dB @ 10 GHz
- \* Gain: typical 17dB @ 10 GHz
- \* Output P1dB: 13 dBm
- \* Output IP3: 25 dBm
- \* DC Voltage: +3V
- \* Operating Current: 51mA
- \* Stainless Steel SMA Female Connector
- \* High Quality Rogers RO4350 RF PCB  
(very low loss and high thermal performance)
- \* ROHS Compliant

## General Description:

LNA7G14GFG is a broadband, MMIC low noise flat gain amplifier with 17 dB typical gain from 7 to 14 GHz in a small 15/16"x15/16"x0.59" shielded RF enclosure (PN: 6UDD2W6S1A2). Its output 1dB compression point is +13dBm and third order linearity (OIP3) is typically 25 dBm. It has excellent Gain Flatness (+16dB Gain) between 7-14 GHz (+/-1dB).

## 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		7		14	GHz
2	Test Frequency			10		GHz
3	Gain		14	17		dB
4	Input Return Loss			15		dB
5	Output Return Loss			14		dB
6	Noise Figure			1.8	2.2	dB
7	Output P1dB		10	13		dBm
8	Output IP3			25		dBm
9	Current, I <sub>DD</sub>			51	75	mA

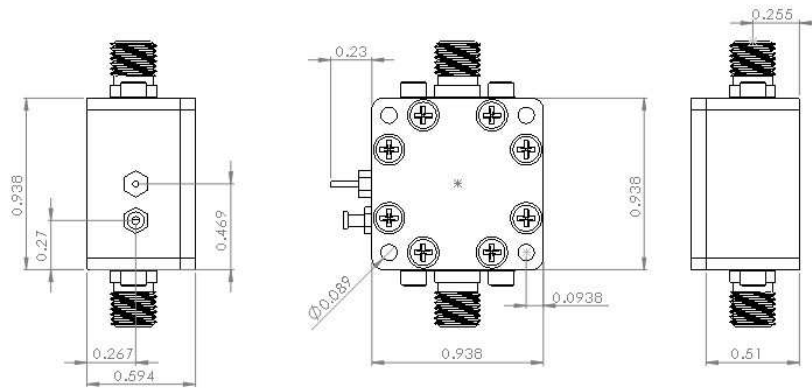
Test Conditions: V<sub>DD</sub>=+3V, I<sub>dd</sub> = 51 mA (typ.) Temp = +25 °C, 50Ω system.

## Absolute Maximum Ratings

Item	Parameter	Rating	UNITS
1	Max Device Voltage	+3.5	V
2	Max RF input Power	+20	dBm
3	Operating Temperature	-40 to +85	°C
4	Max Storage Temperature	-65 to +150	°C

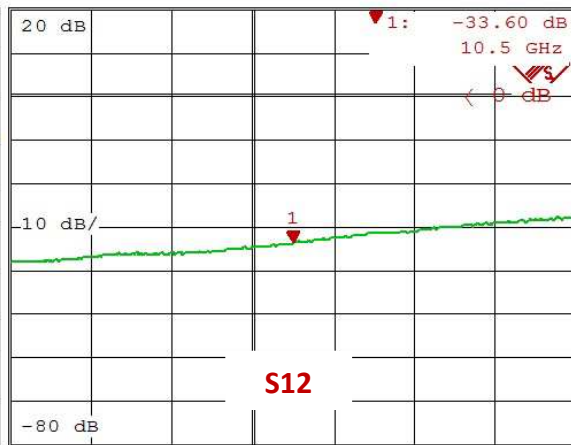
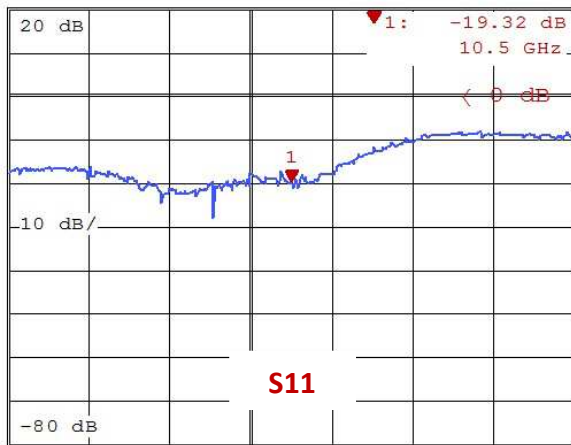


Outline Drawing (inch)

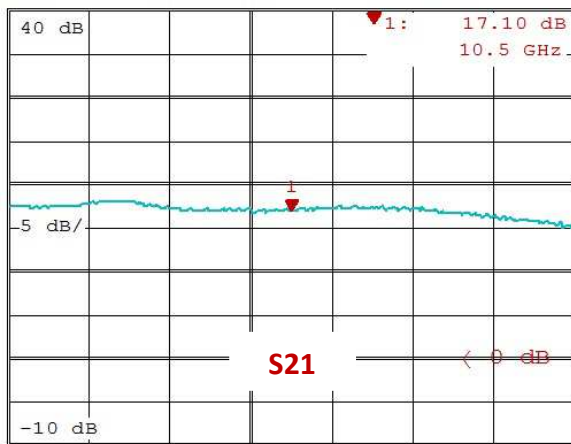


S-Parameters

s11 MAG 10 dB/



s21 MAG 5 dB/ REF 0 dB



s22 MAG 10 dB/ REF 0 dB



START 7 GHz

1 GHz/

STOP 14 GHz

..https://cdn.shopify.com/s/files/1/1592/7469/files/LNA7G14GFG.pdf

