

50Ω (match on input & output) Broadband 6G to 18G Hz

Case PN: 6UDD2W6S1A2

Features:

- * Frequency Range: 6GHz to 18GHz;
- * Noise Figure: typical 1.5dB @ 10 GHz
- * Gain: typical 22B @ 10 GHz
- * Output P1dB: 11 dBm
- * Output IP3: 23 dBm
- * DC Voltage: +3V
- * Operating Current: 52mA
- * Stainless Steel SMA Female Connector
- * High Quality Isola-Tera RF PCB
(very low loss and high thermal performance)
- * ROHS Compliant

General Description:

LNA6G18G is a broadband, MMIC low noise amplifier with 22 dB typical gain from 6 to 18 GHz in a small 15/16"x15/16"x0.59" shielded RF enclosure (PN: 6UDD2W6S1A2). Its output 1dB compression point is +11dBm and third order linearity (OIP3) is typically 23 dBm. It has excellent Gain Flatness (+21dB Gain) between 6-16 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		6		18	GHz
2	Test Frequency			10		GHz
3	Gain		19	22	23	dB
4	Input Return Loss			10		dB
5	Output Return Loss			14		dB
6	Noise Figure			1.5		dB
7	Output P1dB			+11		dBm
8	Output IP3		+22	+23	+24	dBm
9	Current, I _{DD}		40	52	68	mA

Test Conditions: V_{DD}=+3V, I_{dd} = 52 mA (typ.) Temp = +25 °C, 50Ω system.

Absolute Maximum Ratings

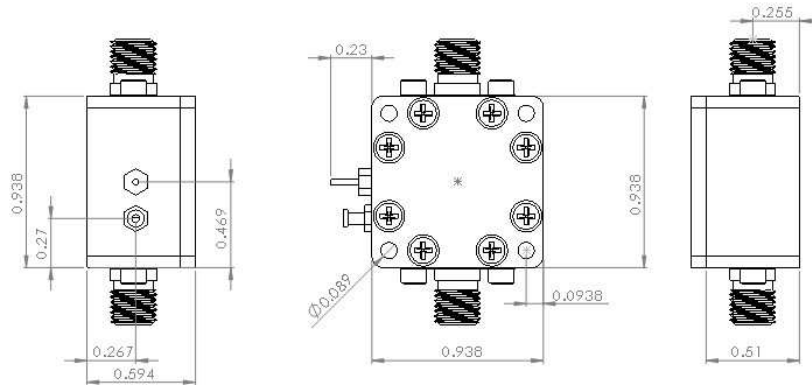
Item	Parameter	Rating	UNITS
1	Max Device Voltage	+5	V
2	Max RF input Power	+20	dBm
3	Operating Temperature	-40 to +85	°C
4	Max Storage Temperature	-55 to +150	°C



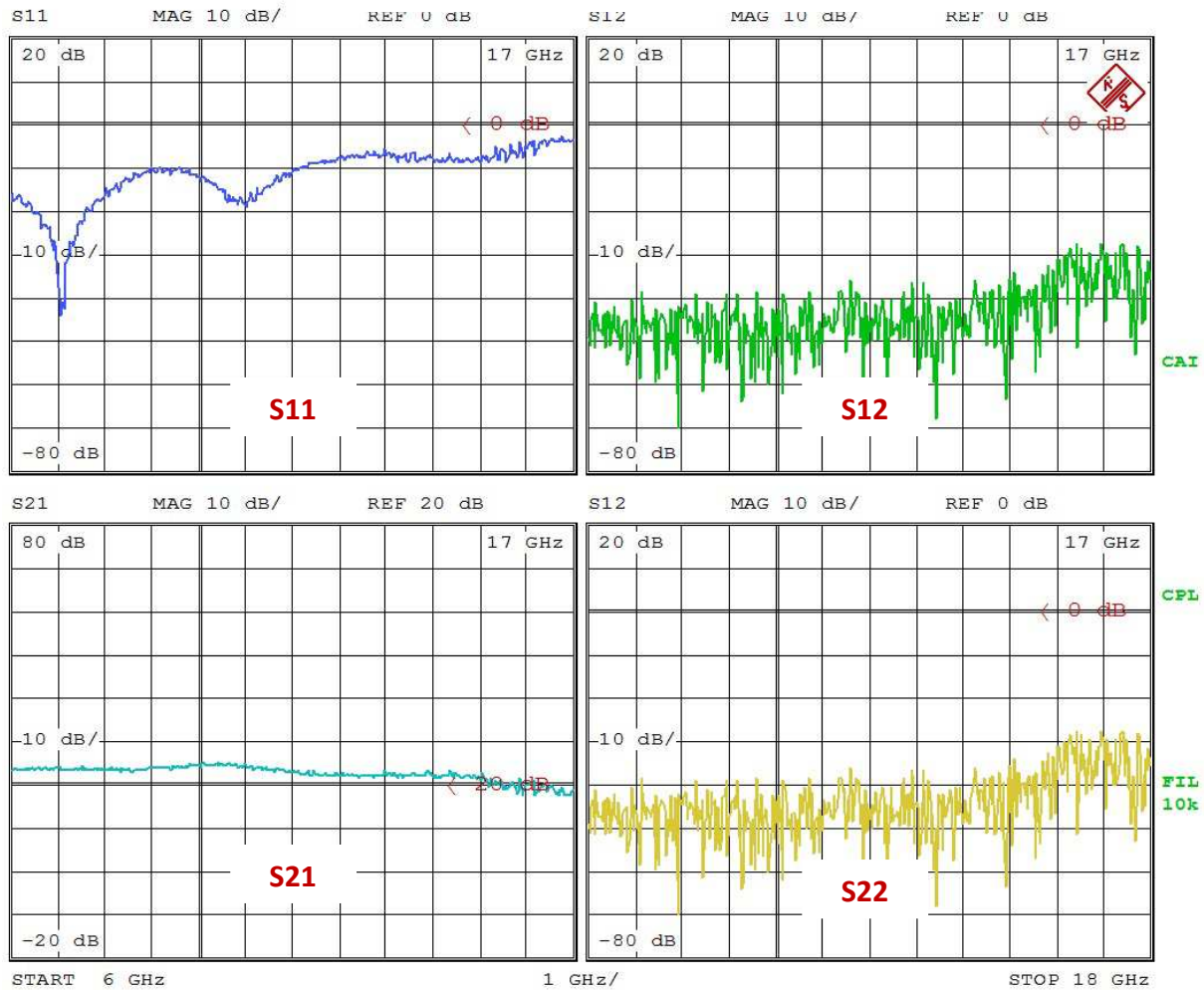
Noise Parameters

Item	Parameter	Typical Values		UNITS
		6-9 GHz	9-18 GHz	
1	Noise Figure	1.8	1.5	dB

Outline Drawing (inch)



S-Parameters



<https://cdn.shopify.com/s/files/1/1592/7469/files/LNA6G18G.pdf>

