

MLNA0622G

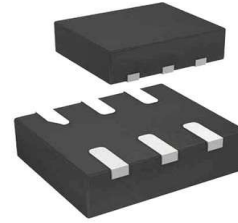
Wideband Ultra Low Noise Amplifier

APPLICATIONS

1. GNSS
2. UHF 600/700/868/915MHz System
3. RFID Systems

Features

1. Ultra Low Noise Figure
2. Based on GaAs technology
3. Power Gain: 15~16.5dB
4. Frequency covers a wide range of applications
5. Low Current with 8mA @3.3V



DFN1.5*1.0mm

Description

The MLNA0622G is a low cost, high performance Ultra-low noise amplifier designed in GaAs. Frequency range from 600MHz to 2.2GHz. . It is ideal for GPS, Beidou, Glonass and Galileo. MLNA0622G has integrated ESD protection on each pin.. All components are 100% RF tested.

Characteristics 1)

Item	Min.	Type.@25°C	Max.	Unit
Frequency Range	1559		1606	MHz
Supply Voltage	1.2	2.8	3.3	V
Input Power			10	dBm
Current			10	mA
Operation Temperature	-40		85	°C
Storage Temperature	-55		105°C	°C
Small Signal Gain		16		dB
Noise Figure			0.5	dB
Input Return Loss	8	12		dBm
Output Return Loss	13	16.5		dBm
Isolation	20	25		dB
Input P1dB		-6		dBm
IIP3		3.5		dBm

1) All the above data are based on specified demo board and tested in 25° environment.

All Use For RF & Microwave

Shenzhen Megsine technology co., ltd www.megsine.com sales@megsine.com may contain us for future information
Jun 08,2012

MLNA0622G

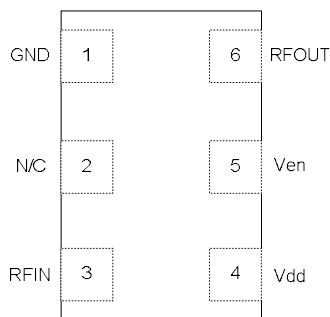
Wideband Ultra Low Noise Amplifier

Characteristics 2)

Item	Min.	Type.@25°C	Max.	Unit
Frequency Range	1166		1606	MHz
Supply Voltage	1.2	2.8	3.3	V
Input Power			10	dBm
Current			10	mA
Operation Temperature	-40		85	°C
Storage Temperature	-55		105°C	°C
Small Signal Gain		16		dB
Noise Figure			0.65	dB
Input Return Loss	6	10.5		dBm
Output Return Loss	11.5	15		dBm
Isolation	20	25		dB
Input P1dB		-6		dBm
IIP3		3		dBm

2) All the above data are based on specified demo board and tested in 25° environment.

PORT CONFIGURATIONS



Pin Number	Pin Name	Description
1	GND	Ground
2	N/C	No Connection. Can be connected to GND in PCB layout.
3	RFIN	RF Input
4	Vdd	DC Voltage Supply
5	Ven	LNA Enable Voltage
6	RFOUT	RF Output

All Use For RF & Microwave

Shenzhen Megsine technology co., ltd www.megsine.com sales@megsine.com may contain us for future information
Jun 08,2012

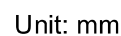
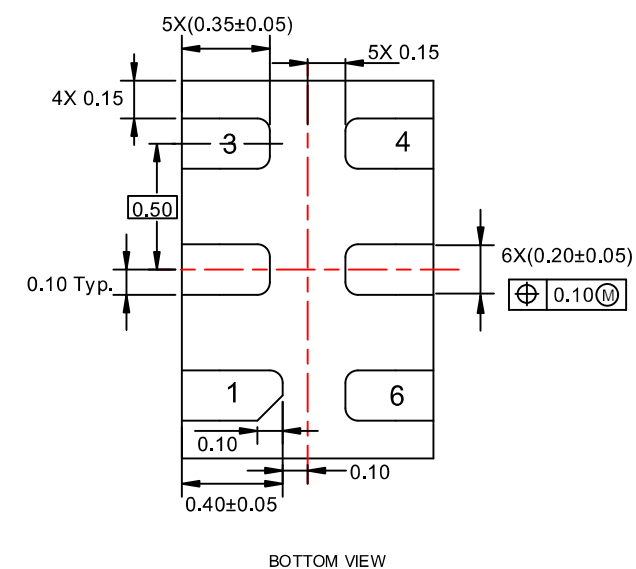
Wideband Ultra Low Noise Amplifier

Pin 1
Corner

1.00

1.50

TOP VIEW



Shenzhen Megsine technology co., ltd www.megsine.com sales@megsine.com may contain us for future information
Jun 08, 2012

Wideband Ultra Low Noise Amplifier

Figure 1: Plan view of the bridge deck showing the layout of the six piles. The deck is 1.20 m wide and 1.20 m deep. The piles are arranged in a 2x3 grid. The top row contains piles 1 and 6, and the bottom row contains piles 3 and 4. The middle row contains piles 2 and 5. The piles are labeled 1, 2, 3, 4, 5, and 6. The dimensions are given as 6x0.20 m for the piles and 6x0.50 m for the spacing between them. The symmetry lines are indicated by dashed red lines.



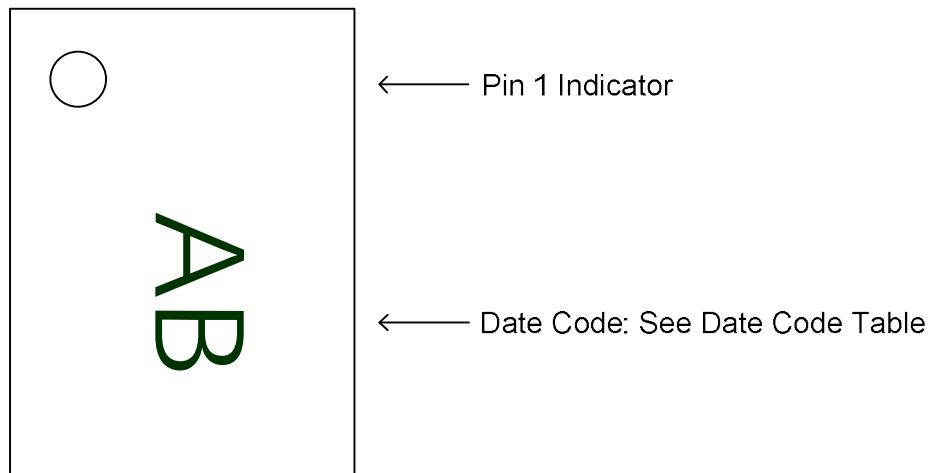
All Use For RF & Microwave

Shenzhen Megsine technology co., ltd www.megsine.com sales@megsine.com may contain us for future information
Jun 08,2012

MLNA0622G

Wideband Ultra Low Noise Amplifier

Package Marking and Date Code Information



MLNA0622G Datecode Table

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
2019	A	B	C	D	E	F	G	H	I	J	K	M
2020	N	P	Q	R	S	T	U	V	W	X	Y	Z
2021	a	b	c	d	e	f	g	h	i	j	k	m
2022	n	p	q	r	s	t	u	v	w	x	y	z
2023	A	B	C	D	E	F	G	H	I	J	K	M
2024	N	P	Q	R	S	T	U	V	W	X	Y	Z
2025	a	b	c	d	e	f	g	h	i	j	k	m
2026	n	p	q	r	s	t	u	v	w	x	y	z

All Use For RF & Microwave

Shenzhen Megsine technology co., ltd www.megsine.com sales@megsine.com may contain us for future information
Jun 08,2012

MLNA0622G

Wideband Ultra Low Noise Amplifier

Revision	Description	Date
Rev0	Preliminary	2020/3/29
Rev1	Update	2021/6/9

All Use For RF & Microwave

Shenzhen Megsine technology co., ltd www.megsine.com sales@megsine.com may contain us for future information
Jun 08,2012