

LIA002A: 100 MHz ~ 200 MHz In-Line Amplifier

Key Features

- 100 MHz ~ 200 MHz
- Gain: 23 dB
- VSWR: 1.25:1
- RoHS Compliant
- Made In USA

Application

- In-line gain booster

Absolute Maximum Ratings ^[1]

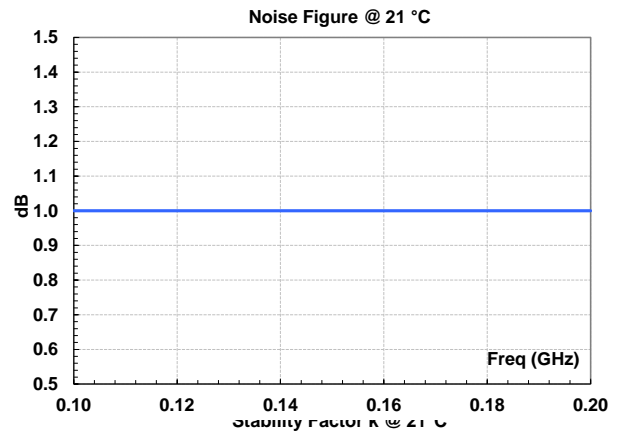
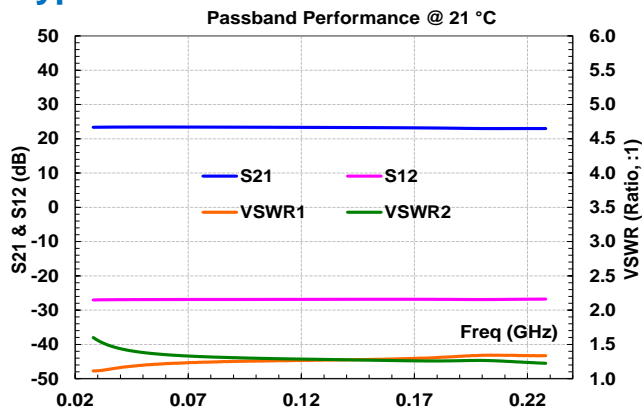
Parameters/Conditions	Maximum	Unit
Channel Temperature	+150	°C
Junction to Case	220	°C/W
Drain Current	100	mA
CW RF Input Power	+10	dBm
RF Output Supply Voltage	15	V
Operating Temperature	-40 ~ +85	°C
Storage Temperature	-55 ~ +125	°C

[1] Operating beyond these limits may cause permanent damages.

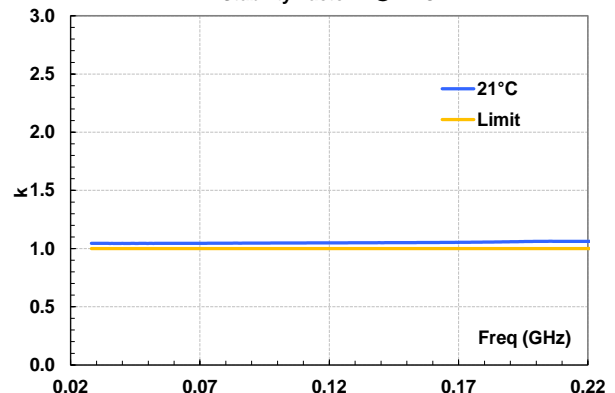
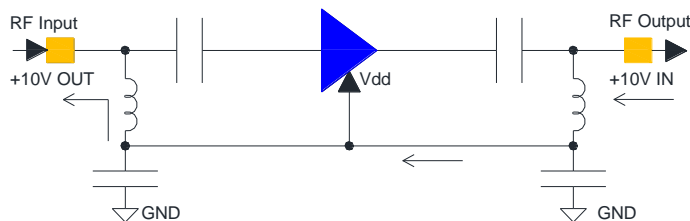
Electrical Performance

Symbol	Parameters	Test Constraints	Min	Typ.	Max	Unit
G	Gain			23		dB
ΔG	Gain Flatness			± 0.25		dB
NF	Noise Figure	100 MHz ~ 200 MHz		1.0		dB
S_{12}	Reverse Isolation			25		dB
$VSWR_1$	VSWR – Input			1.25:1	1.5:1	Ratio
$VSWR_2$	VSWR – Output			1.25:1	1.5:1	Ratio
I_{dd}	Device Current	Vdd = +10V		60		mA
V_{dd}	DC Power Supply Voltage		+7.0	+10.0	+15.0	V
Z_0	Impedance	100 MHz ~ 200 MHz		50		Ohm

Typical Measurement Results

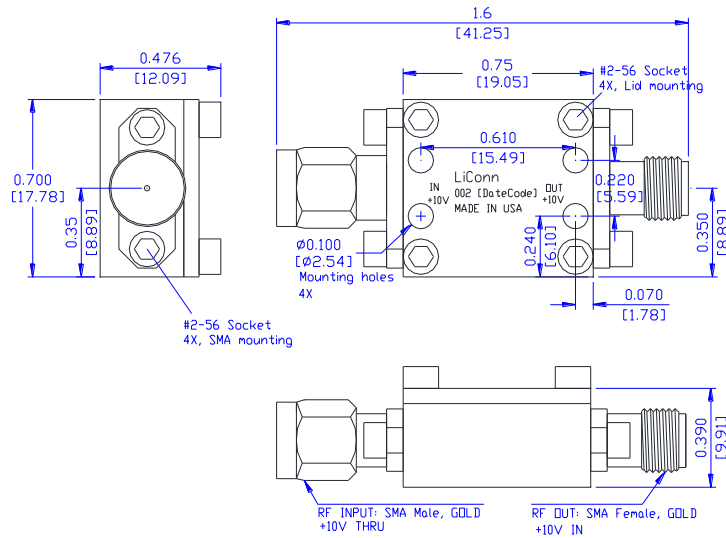


Functional Block Diagram



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Mechanical Outline



Unit: Inch
[mm]

TOLENRANCE IS
NON-ACCUMULATIVE:
X.X: ± 0.02 "
X.XX: ± 0.01 "
X.XXX: ± 0.005

Base Material:
Aluminum Alloy 6061
Finish:
RoHS Compliant Conductive
Clear Plating

Ordering

Model number	LIA002A
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