

# Low Noise Amplifier

ZX60-362GLN+

50Ω 3300 to 3600 MHz

## Features

- Ultra low noise figure, 0.9 dB typ.
- Output power, up to +16 dBm typ.
- Good output IP3, 29 dBm typ.
- Good return loss
- Unconditionally stable
- Protected by US patent 6,790,049

## Applications

- WiMAX
- Defence system radar
- Base transceiver station, tower mounted amplifier, repeater
- General purpose low noise amplifier
- Lab
- Instrumentation
- Test equipment



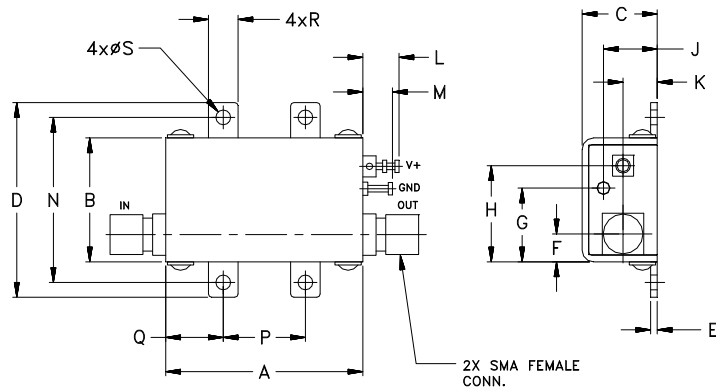
Case Style: GA955	
Connectors	Model
SMA	ZX60-362GLN-S+

**+RoHS Compliant**  
 The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

## Electrical Specifications at 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		3300		3600	MHz
Noise Figure	3300-3600		0.9	1.2	dB
Gain	3300-3600	18	20		dB
Gain Flatness	3300-3600		± 0.3	± 0.6	dB
Output Power at 1dB compression	3300-3600	13	16		dBm
Output third order intercept point	3300-3600		29		dBm
Input VSWR	3300-3600		1.2		:1
Output VSWR	3300-3600		1.4		:1
Active Directivity	3300-3600		22		dB
DC Supply Voltage			5		V
Supply Current			100	140	mA

## Outline Drawing



## Maximum Ratings

Parameter	Ratings
Operating Temperature	-40°C to 85°C Case
Storage Temperature	-55°C to 100°C
DC Voltage	5.5 V
Input RF Power (no damage)	+15 dBm
Power Consumption	770 mW

Permanent damage may occur if any of these limits are exceeded.



NOTE: When soldering the DC connections, caution must be used to avoid overheating the DC terminals. See Application Note AN-40-10.

## Outline Dimensions (inch)

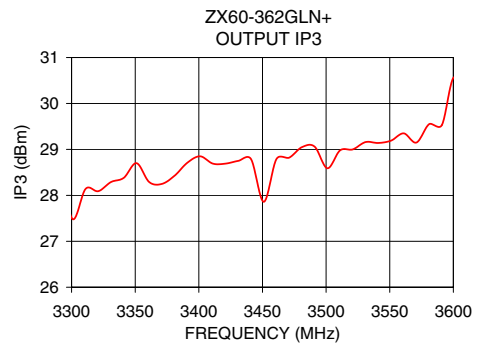
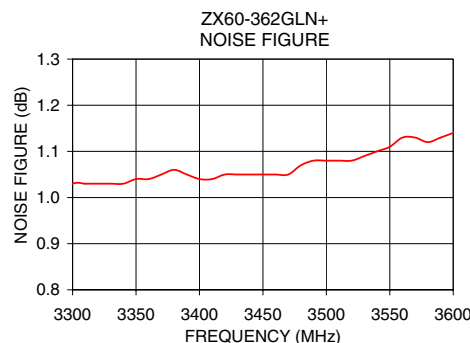
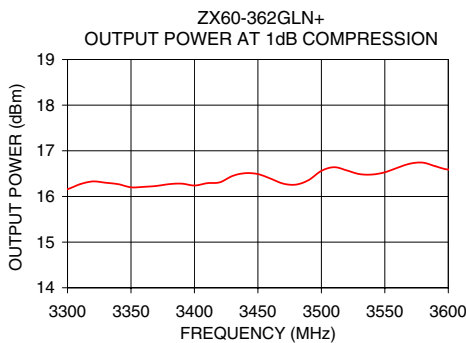
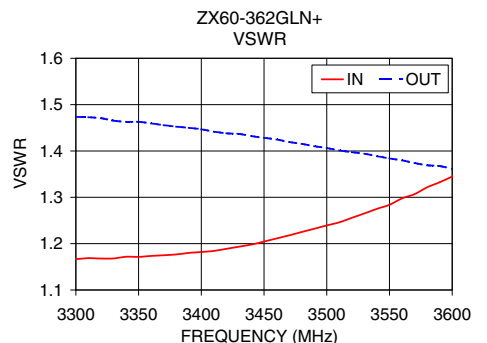
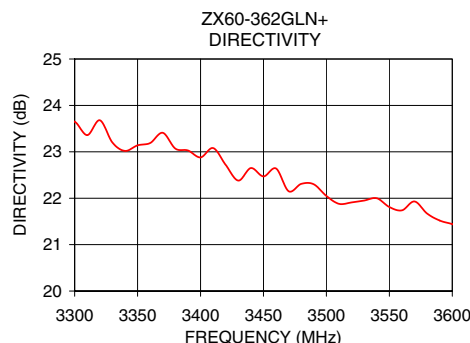
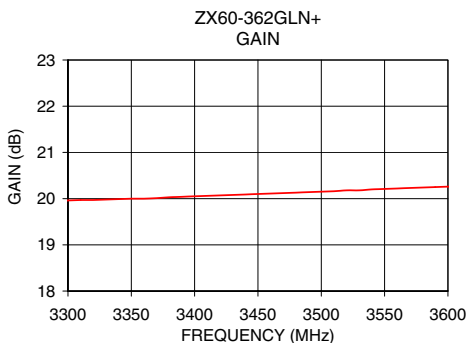
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	wt.
1.20	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.18	1.00	.50	.35	.18	.106	grams
30.48	19.05	11.68	29.97	1.02	4.32	11.43	14.99	8.38	5.33	5.59	4.57	25.40	12.70	8.89	4.57	2.69	35.0

Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR IN (:1)	VSWR OUT (:1)	POWER OUT @ 1dB COMPRESSION (dBm)	OUTPUT IP3 (dBm)	NF (dB)
3300.00	19.96	23.65	1.17	1.47	16.16	27.48	1.03
3320.00	19.97	23.68	1.17	1.47	16.33	28.09	1.03
3330.00	19.98	23.20	1.17	1.47	16.30	28.29	1.03
3350.00	20.00	23.14	1.17	1.46	16.20	28.70	1.04
3360.00	20.00	23.19	1.17	1.46	16.21	28.29	1.04
3380.00	20.03	23.07	1.18	1.45	16.27	28.43	1.06
3400.00	20.05	22.88	1.18	1.45	16.24	28.85	1.04
3410.00	20.06	23.08	1.18	1.44	16.29	28.69	1.04
3430.00	20.08	22.38	1.19	1.44	16.45	28.75	1.05
3450.00	20.10	22.47	1.20	1.43	16.49	27.86	1.05
3470.00	20.12	22.15	1.22	1.42	16.28	28.82	1.05
3480.00	20.13	22.31	1.23	1.42	16.26	29.05	1.07
3500.00	20.15	22.05	1.24	1.41	16.56	28.59	1.08
3520.00	20.18	21.91	1.26	1.40	16.57	29.00	1.08
3530.00	20.18	21.95	1.27	1.39	16.49	29.16	1.09
3550.00	20.21	21.81	1.28	1.38	16.53	29.19	1.11
3560.00	20.22	21.74	1.30	1.38	16.63	29.35	1.13
3580.00	20.24	21.67	1.32	1.37	16.74	29.55	1.12
3590.00	20.25	21.52	1.33	1.37	16.66	29.53	1.13
3600.00	20.26	21.44	1.34	1.36	16.59	30.57	1.14



**Notes**

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

