



COAXIAL

# Low Noise Amplifier

## ZX60-542LN+

50Ω 4400 to 5400 MHz SMA Female

### THE BIG DEAL

- Low noise figure, 1.9 dB typ.
- Output power, up to 10 dBm typ.
- Reverse polarity protection
- Protected by US patent 6,790,049

### APPLICATIONS

- Front-end amplifier
- Satellite TV
- Public safety
- Astronomy
- Weather
- Defense & radar
- Instrumentation
- Test equipment



Generic photo used for illustration purposes only

Model No.	ZX60-542LN+
Case Style	GA955
Connectors	SMA Female

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

### ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		4400		5400	MHz
Noise Figure	4400 - 5400	—	1.9	3.0	dB
Gain	4400 - 5400	22	24	—	dB
Gain Flatness (±)	4400 - 5400	—	0.3	0.8	dB
Input VSWR	4400 - 5400	—	1.5	—	:1
Output VSWR	4400 - 5400	—	1.5	—	:1
Output Power at 1dB Compression	4400 - 5400	8	10	—	dBm
Output IP3	4400 - 5400	—	23	—	dBm
Device Operating Voltage	4400 - 5400	—	+12	—	V
Device Operating Current	4400 - 5400	—	60	80	mA

### ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Parameter	Ratings
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	+13V
Power	0.96W

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





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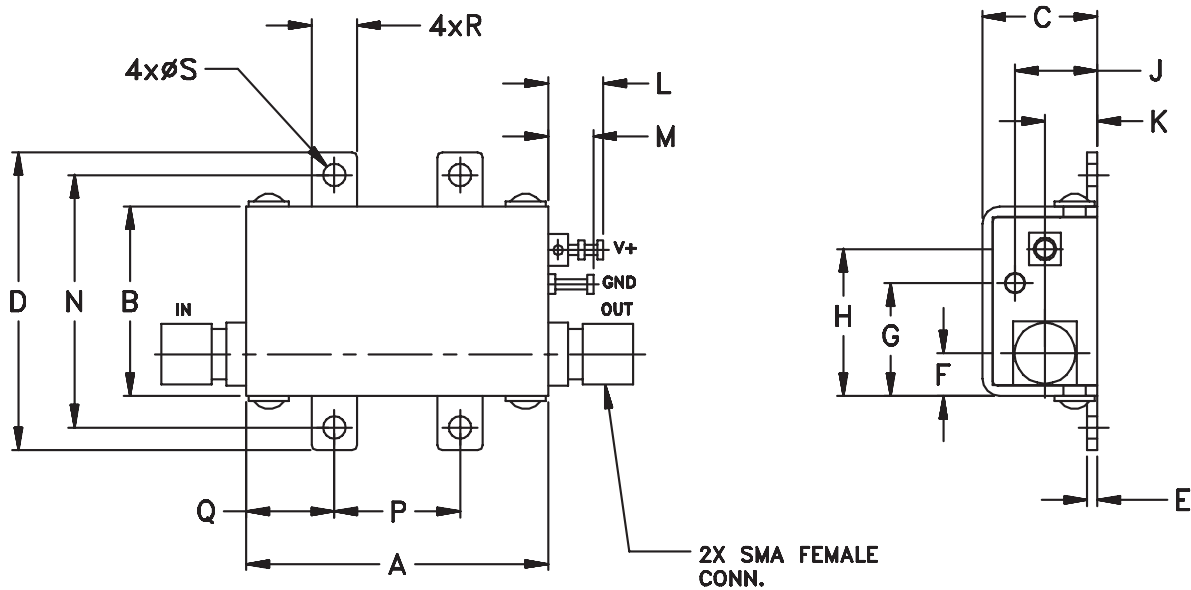
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### OUTLINE DRAWING



### OUTLINE DIMENSIONS (Inches / mm)

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	.09	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	2.29	35.00





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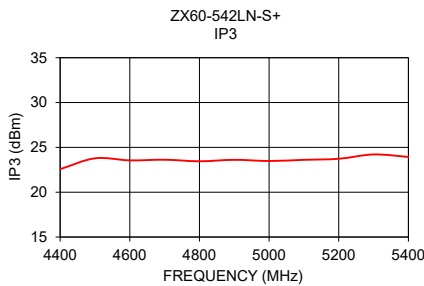
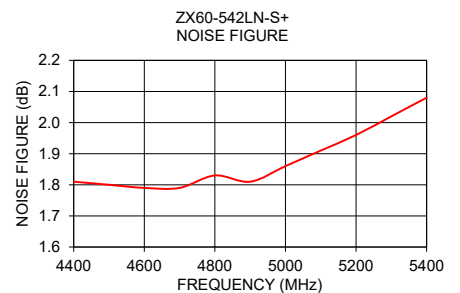
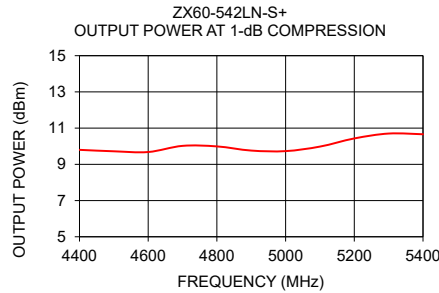
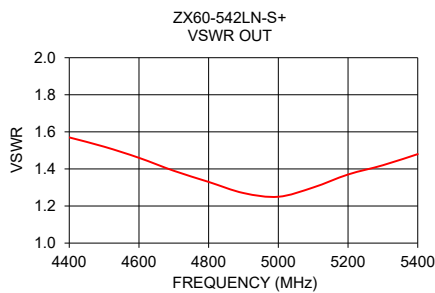
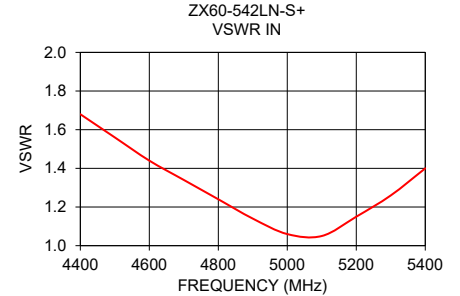
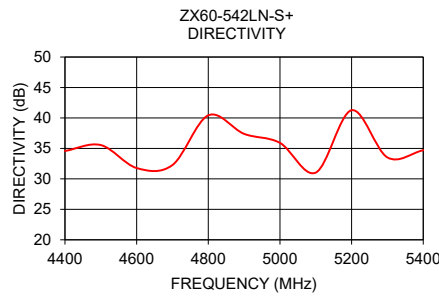
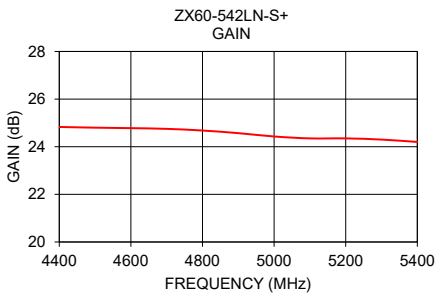
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### TYPICAL PERFORMANCE DATA/CURVES

Frequency (MHz)	Gain (dB)	Directivity (dB)	VSWR (:1)		Noise Figure (dB)	Power Out @1 dB COMPR. (dBm)	IP3 (dBm)
			IN	OUT			
4400.0	24.83	34.58	1.68	1.57	1.81	9.80	22.57
4500.0	24.80	35.55	1.56	1.52	1.80	9.72	23.78
4600.0	24.78	31.78	1.44	1.46	1.79	9.68	23.55
4700.0	24.75	32.27	1.34	1.39	1.79	10.02	23.62
4800.0	24.68	40.43	1.24	1.33	1.83	9.99	23.45
4900.0	24.57	37.39	1.14	1.27	1.81	9.76	23.61
5000.0	24.43	35.91	1.06	1.25	1.86	9.73	23.48
5100.0	24.35	31.03	1.05	1.30	1.91	9.98	23.61
5200.0	24.35	41.27	1.15	1.37	1.96	10.43	23.73
5300.0	24.30	33.52	1.26	1.42	2.02	10.70	24.21
5400.0	24.20	34.70	1.40	1.48	2.08	10.66	23.93



- 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/terms/viewterm.html](http://www.minicircuits.com/terms/viewterm.html)

