

# Coaxial Amplifier

50Ω 0.5 to 4000 MHz

## ZX60-43-S+

### Features

- wide bandwidth, 0.5 to 4000 MHz
- output power, up to 18.5 dBm typ.
- protected by US patent 6,790,049 & 6,943,629

### Applications

- buffer amplifier
- driver amplifier
- cellular
- PCS
- GPS
- bluetooth
- instrumentation
- test equipment



Generic photo used for illustration purposes only

CASE STYLE: GC957

Connectors	Model
SMA	ZX60-43-S+

**+RoHS Compliant**

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

### Electrical Specifications at 25°C, 5V

Parameter	Condition (MHz)	Min	Typ.	Max.	Units
Frequency		0.5		4000	MHz
Gain	100	—	23.1	—	dB
	1000	—	21.7	—	
	2000	17	18.6	—	
	4000	—	14.3	—	
Output Power at 1dB compression	0.5	—	17.3	—	dBm
	4000	—	17.3	—	
Noise Figure		—	5.4	—	dB
Output third order intercept point		—	+33	—	dBm
Input VSWR		—	1.2	—	:1
Output VSWR		—	2.0	—	:1
Active Directivity		—	7-9	—	dB
Supply Current		—	90	110	mA

### Maximum Ratings

Parameter	Ratings
Operating Temperature	-40°C to 85°C Case
Storage Temperature	-55°C to 100°C
DC Voltage	7V
Input RF Power (no damage)	+13 dBm
Power	0.77W

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

### Notes

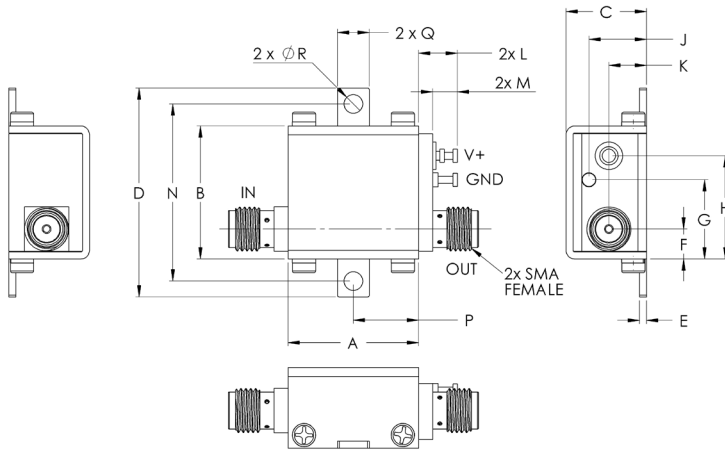
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

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)



## Outline Drawing



**⚠** NOTE: When soldering the DC connections, caution must be used to avoid overheating the DC terminal. See Application Note. [AN-40-010](#).

## Outline Dimensions (inch / mm)

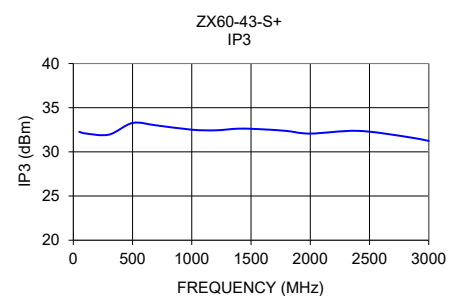
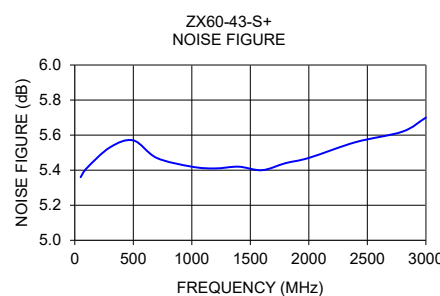
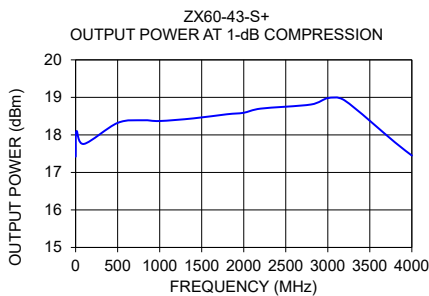
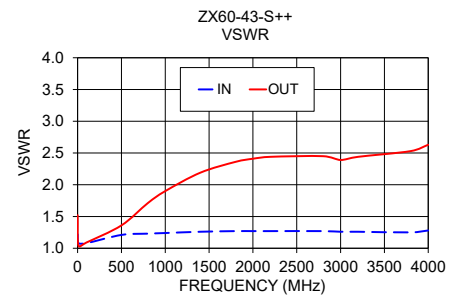
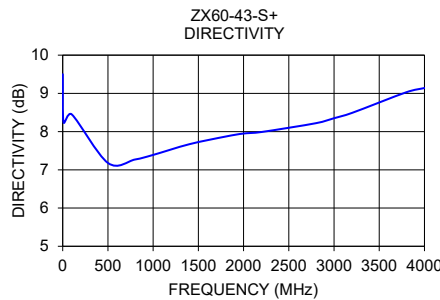
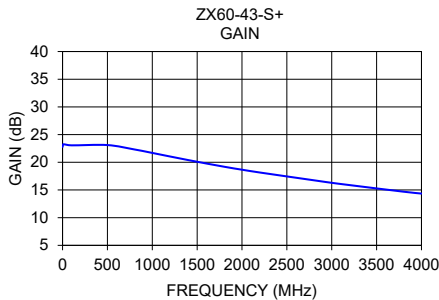
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	wt
.74	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.14	1.00	.37	.18	.106	grams
18.80	19.1	11.68	30.0	1.02	4.32	11.4	14.99	8.38	5.33	5.59	3.56	25.40	9.40	4.57	2.69	23.0

### 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)



FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR IN (:1)	VSWR OUT (:1)	POWER OUT @1 dB COMPR. (dBm)	FREQUENCY (MHz)	IP3 (dBm)	NF (dB)
0.50	22.79	9.50	1.22	1.52	17.42	10	32.33	5.45
0.70	22.92	9.17	1.16	1.37	17.56	50	32.27	5.36
1.00	23.01	8.94	1.13	1.27	17.73	100	32.09	5.41
10.00	23.25	8.24	1.08	1.04	18.10	200	31.68	5.35
100.00	23.06	8.45	1.08	1.09	17.76	300	31.95	5.53
300.00	23.03	8.06	1.16	1.13	17.68	400	33.11	5.56
500.00	23.11	7.18	1.21	1.36	18.32	500	33.27	5.57
700.00	22.62	7.18	1.23	1.60	18.40	600	33.13	5.52
800.00	22.32	7.27	1.23	1.71	18.39	700	33.00	5.47
805.00	22.31	7.25	1.23	1.72	18.39	800	32.71	5.43
1000.00	21.69	7.39	1.24	1.90	18.37	1000	32.51	5.42
1200.00	21.04	7.52	1.25	2.06	18.48	1100	32.46	5.43
1400.00	20.40	7.67	1.26	2.19	18.44	1200	32.44	5.41
1600.00	19.79	7.77	1.26	2.28	18.52	1300	32.55	5.41
1800.00	19.20	7.87	1.27	2.36	18.55	1400	32.63	5.42
2000.00	18.66	7.95	1.27	2.41	18.59	1500	31.84	5.39
2200.00	18.15	7.99	1.27	2.44	18.70	1600	32.55	5.40
2400.00	17.66	8.05	1.28	2.45	18.50	1700	31.75	5.40
2600.00	17.20	8.11	1.27	2.46	18.67	1800	32.37	5.44
2800.00	16.75	8.22	1.27	2.45	18.81	2000	32.07	5.47
3000.00	16.29	8.35	1.26	2.39	18.98	2200	32.04	5.50
3200.00	15.88	8.49	1.26	2.44	18.92	2400	32.38	5.56
3400.00	15.47	8.62	1.25	2.45	18.55	2600	31.92	5.56
3600.00	15.07	8.84	1.25	2.48	18.12	2800	31.73	5.62
3800.00	14.69	9.03	1.25	2.53	17.80	3000	31.24	5.70
4000.00	14.35	9.14	1.28	2.63	17.45			



**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)

