

Coaxial Amplifier

ZX60-8008E-S+

50Ω 20 MHz to 8 GHz

Features

- Wide bandwidth, 20 MHz to 8 GHz
- Good IP3, 24 dBm typ.
- Excellent repeatability
- Protected by US patent 6,790,049

Applications

- Buffer amplifier
- Cellular
- PCS
- Lab
- Instrumentation
- Test equipment



CASE STYLE: GC957

Connectors	Model
SMA	ZX60-8008E-S+

+RoHS Compliant

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

Electrical Specifications at $T_{AMB} = 25^{\circ}\text{C}$

MODEL NO.	FREQ. (GHz) $f_L - f_U$	DC VOLTAGE @ Pin V+ (V)	GAIN over frequency in GHz Typ (dB)								MAXIMUM POWER (dBm) Output (1 dB Comp.) Typ. f_L f_U		DYNAMIC RANGE NF IP3 (dB) (dBm) Typ. Typ.		VSWR (:1) Typ.				ACTIVE DIRECTIVITY (dB) Isolation-Gain Typ.	DC OPERATING CURRENT @ Pin V+ (mA) Typ. Max.		
			0.1	1.0	2.0	3.0	4.0	5.0	6.0	8.0	Min.at 2 GHz	Typ.	Typ.	f_L-3 GHz	$3-f_U$ GHz	f_L-3 GHz	$3-f_U$ GHz	Typ.		Typ.	Max.	
ZX60-8008E-S+	0.02-8	12.0	11.5	11.1	10.4	9.9	9.0	9.0	8.5	7.0	8.4	10.8	6.6	4.1	24	1.3	1.5	1.6	1.9	6 - 11	39	50

Maximum Ratings

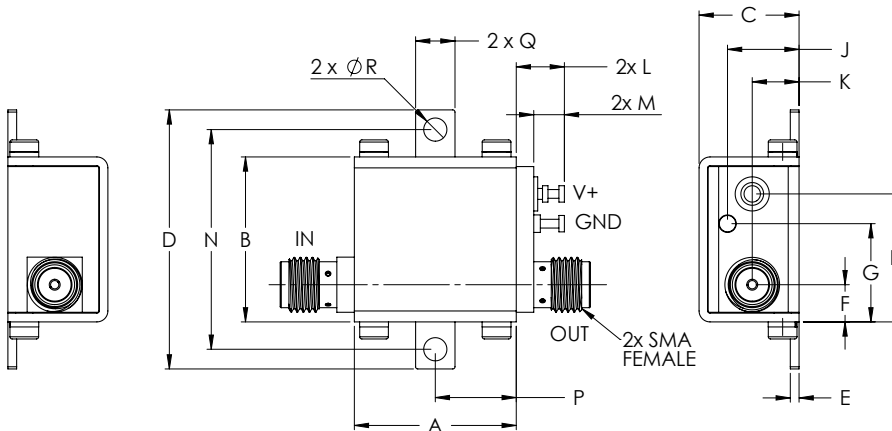
Operating Temperature	-45°C to 80°C case
Storage Temperature	-55°C to 100°C
DC Voltage	12.5V
Input Power(no Damage)	15dBm
Power	650mW

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 Drawing



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	GRAM
18.80	19.05	11.68	29.97	1.02	4.32	11.43	14.99	8.38	5.33	5.59	3.56	25.40	9.40	4.57	2.69	23.0

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



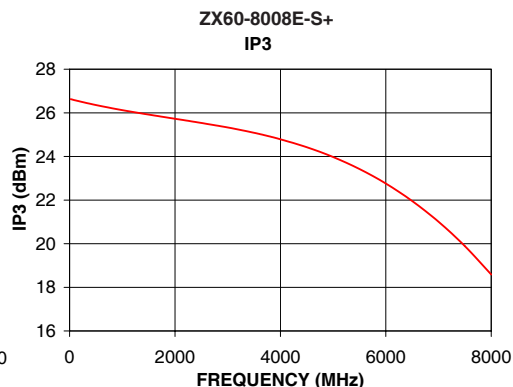
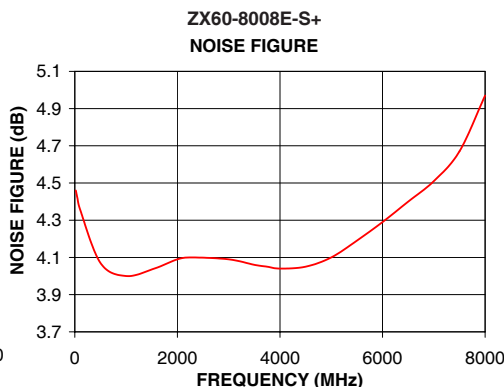
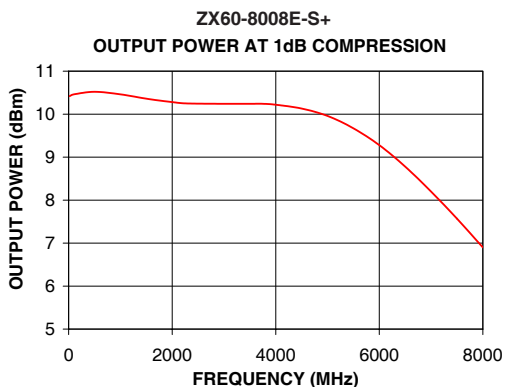
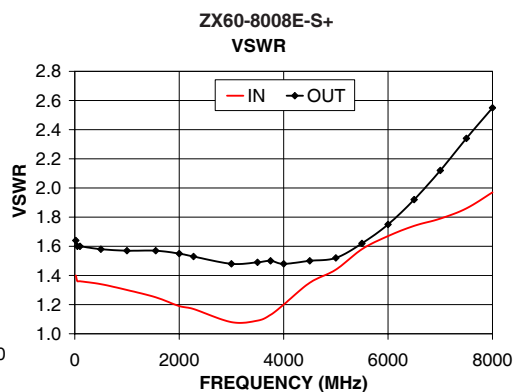
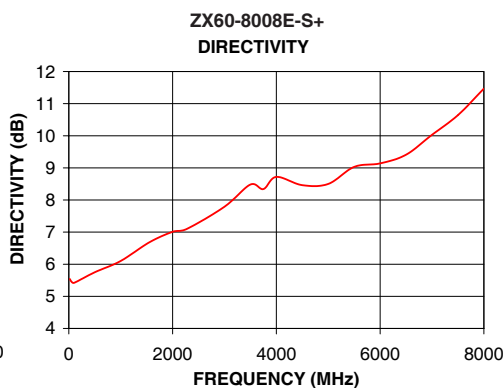
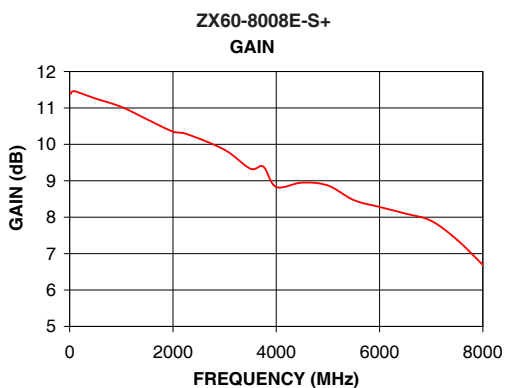
www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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Typical Performance Data & Curves at 25°C

ZX60-8008E-S+

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR IN (:1)	VSWR OUT (:1)	POWER OUT @1dB COMPRESSION (dBm)	IP3 (dBm)	NF (dB)
20	11.39	5.54	1.40	1.64	10.42	26.63	4.46
50	11.45	5.46	1.36	1.60	10.44	26.61	4.42
100	11.46	5.42	1.36	1.60	10.46	26.58	4.36
500	11.26	5.75	1.34	1.58	10.52	26.36	4.07
1000	11.03	6.10	1.30	1.57	10.46	26.12	4.00
1550	10.65	6.68	1.25	1.57	10.35	25.90	4.04
2000	10.35	7.01	1.19	1.55	10.28	25.73	4.09
2275	10.28	7.10	1.17	1.53	10.25	25.63	4.10
3000	9.85	7.79	1.08	1.48	10.24	25.33	4.09
3500	9.33	8.48	1.09	1.49	10.24	25.08	4.06
3750	9.39	8.34	1.13	1.50	10.24	24.94	4.05
4000	8.83	8.72	1.20	1.48	10.22	24.79	4.04
4500	8.95	8.46	1.35	1.50	10.13	24.42	4.05
5000	8.87	8.50	1.44	1.52	9.96	23.98	4.10
5500	8.47	9.03	1.58	1.62	9.67	23.43	4.19
6000	8.28	9.14	1.67	1.75	9.28	22.76	4.29
6500	8.10	9.41	1.74	1.92	8.78	21.96	4.40
7000	7.90	10.03	1.79	2.12	8.20	21.01	4.51
7500	7.38	10.64	1.86	2.34	7.57	19.89	4.67
8000	6.69	11.47	1.97	2.55	6.90	18.59	4.97



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