Coaxial

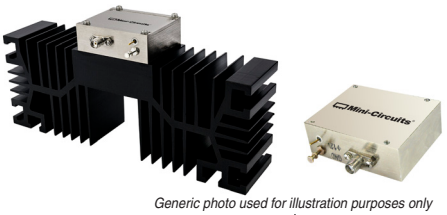
Amplifier

ZVE-8G+

50Ω Medium High Power 2000 to 8000 MHz

Features

- wideband, 2 to 8 GHz
- low noise, 4 dB typ.
- high IP3, +40 dBm typ.
- high dynamic range
- high gain, 30 dB min



Generic photo used for illustration purposes only

Model No.	ZVE-8G+	ZVE-8GX+
Case Style	BN333	
Connectors	SMA	

+RoHS Compliant

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

Applications

- satellite communications
- line-of-sight transmitters
- signal generators
- spread-spectrum communication

Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)		MAXIMUM POWER (dBm)		DYNAMIC RANGE		VSWR (:1) Max.		DC POWER	
	f_L	f_U	Min.	Flatness Max.	Output (1 dB Compr. Min.)	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (A) Max.
ZVE-8G+	2000	8000	30	±2.0	+30**	+20	4	+40	2.0	2.0	12	1.2
ZVE-8GX+*	2000	8000	30	±2.0	+30**	+20	4	+40	2.0	2.0	12	1.2

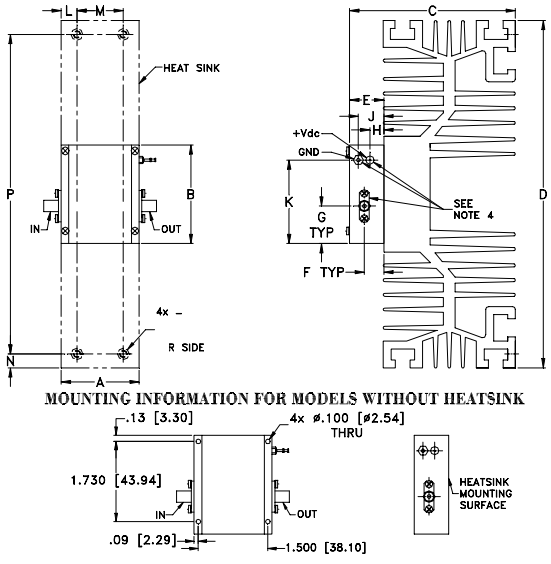
* Heat sink not included

** At 25°C; +30 dBm typ. at 54°C ambient.

Open load is not recommended, potentially can cause damage.
With no load derate max input power by 20 dB

To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum base-plate temperature to 85°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.3°C/W Max.

Outline Drawing



Maximum Ratings

Operating Temperature	-55°C to 54°C
Storage Temperature	-65°C to 150°C
DC Voltage	+18V Max.

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

Outline Dimensions (inch / mm)

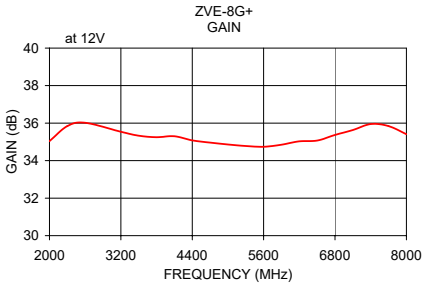
A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
1.680	2.130	3.6	7.5	.74	.42	.81	.30	.55	1.80	.34	1.000	.30	6.900	grams*
42.67	54.10	91.44	190.50	18.80	10.67	20.57	7.62	13.97	45.72	8.64	25.40	7.62	175.26	700

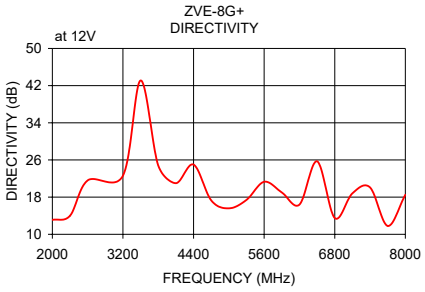
*100 grams without heatsink

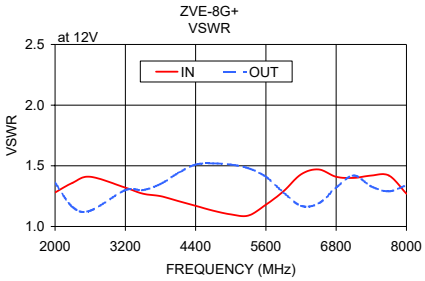
Notes

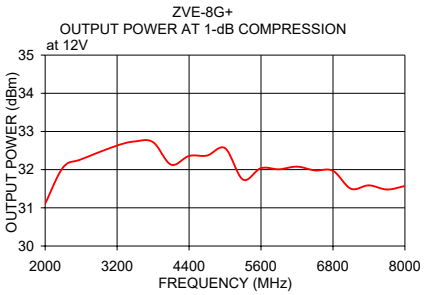
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's 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

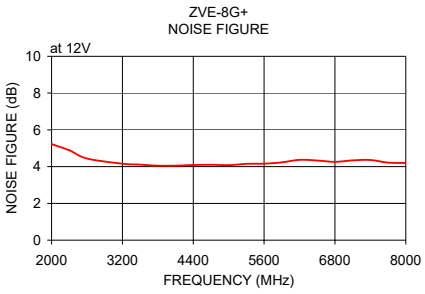
FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	12V	IN	OUT	12V	12V
2000.00	35.04	13.10	1.28	1.36	5.23	31.11
2300.00	35.84	14.00	1.36	1.16	4.89	32.06
2600.00	36.02	21.60	1.41	1.13	4.44	32.27
3200.00	35.54	22.60	1.32	1.30	4.16	32.63
3500.00	35.33	43.10	1.27	1.30	4.11	32.74
3800.00	35.25	24.80	1.25	1.35	4.05	32.72
4100.00	35.30	21.00	1.21	1.44	4.05	32.13
4400.00	35.08	25.00	1.17	1.51	4.09	32.36
4700.00	34.96	17.30	1.13	1.52	4.10	32.37
5000.00	34.86	15.60	1.10	1.51	4.08	32.56
5300.00	34.78	17.40	1.09	1.48	4.15	31.74
5600.00	34.74	21.30	1.18	1.41	4.16	32.04
5900.00	34.85	19.00	1.29	1.28	4.23	32.01
6200.00	35.03	16.40	1.43	1.17	4.37	32.08
6500.00	35.07	25.70	1.47	1.19	4.33	31.98
6800.00	35.37	13.50	1.41	1.32	4.26	31.97
7100.00	35.63	18.80	1.40	1.42	4.34	31.50
7400.00	35.95	20.10	1.42	1.33	4.36	31.59
7700.00	35.84	11.80	1.42	1.29	4.22	31.48
8000.00	35.41	18.50	1.27	1.34	4.20	31.57











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