

Coaxial Amplifier

ZFL-1000VH+ ZFL-1000VH

50Ω Medium Power 10 to 1000 MHz

Features

- wideband, 10 to 1000 MHz
- low noise, 4.5 dB typ.
- high IP3, +38 dBm typ.

Applications

- cellular
- VHF/UHF
- test equipment



Connectors	Model	Price	Qty.
SMA	ZFL-1000VH(+)	\$229.00 ea.	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)
SMA	ZFL-1000VHX(+)	\$219.00 ea.	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)		MAXIMUM POWER (dBm)		DYNAMIC RANGE		VSWR (:1) Typ.		DC POWER	
	f_L	f_U	Min.	Flatness Max.	Output (1 dB Compr.)	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In ¹	Out	Volt (V) Nom.	Current (mA) Max.
ZFL-1000VH(+)	10	1000	20	±1.0	+25	+15	4.5	+38	2.0	2.5	15	320
ZFL-1000VHX(+)*	10	1000	20	±1.0	+25	+15	4.5	+38	2.0	2.5	15	320

* Heat sink not included.

¹ Input VSWR 2:1 Max. increasing below 20 MHz to 2.25:1 max. at 10 MHz
Open load is not recommended, potentially can cause damage.
With no load derate max input power by 20 dB

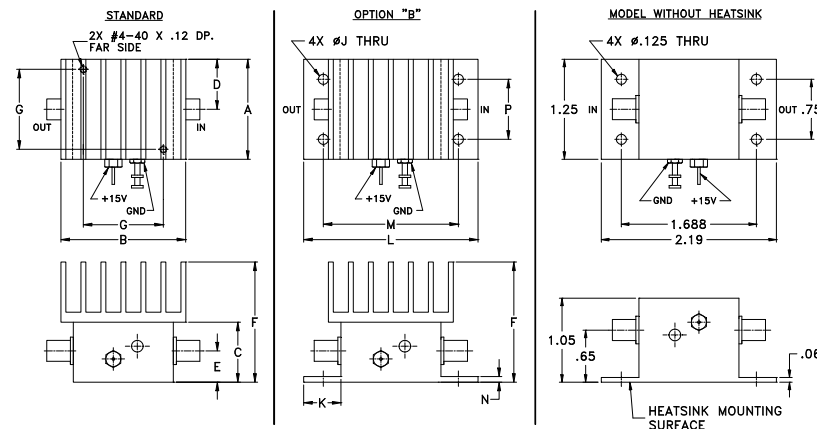
To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum temperature to 71°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 8°C/W Max.

Maximum Ratings

Operating Temperature	-20°C to 71°C
Storage Temperature	-55°C to 100°C
DC Voltage	+17V Max.

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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt*
1.25	1.56	.75	.63	.39	1.50	1.000	--	.125	.46	2.19	1.688	.06	.750	grams
31.75	39.62	19.05	16.00	9.91	38.10	25.40	--	3.18	11.68	55.63	42.88	1.52	19.05	85.0

*70 grams with heat sink

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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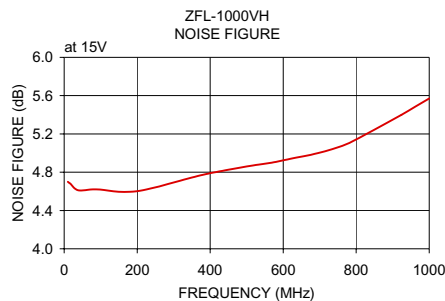
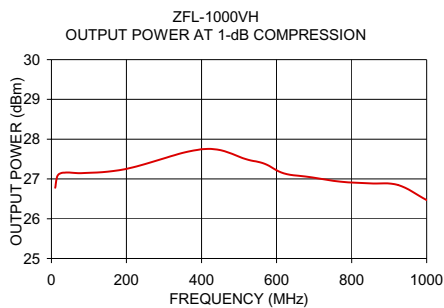
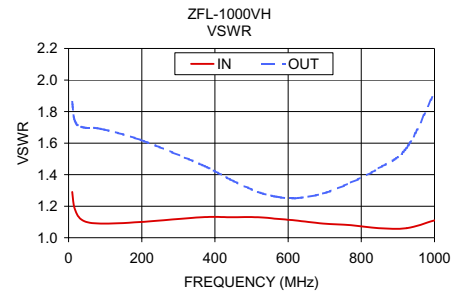
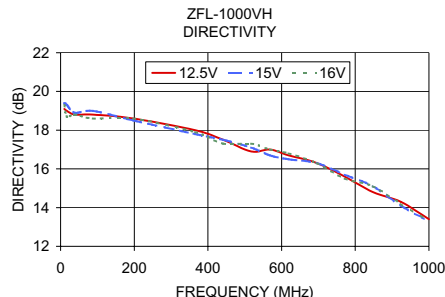
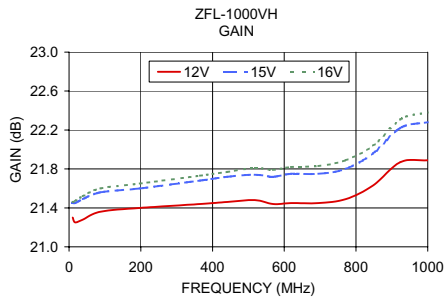
For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

Typical Performance Data/Curves

ZFL-1000VH+ ZFL-1000VH

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
10.00	21.30	21.45	21.46	19.10	19.40	19.30	1.29	1.86	4.70	26.78
17.20	21.25	21.45	21.47	19.00	19.30	18.70	1.18	1.74	4.68	27.09
38.80	21.28	21.49	21.52	18.80	18.90	18.80	1.11	1.70	4.61	27.16
87.60	21.36	21.56	21.60	18.80	19.00	18.60	1.09	1.69	4.62	27.15
197.60	21.40	21.60	21.65	18.60	18.50	18.60	1.10	1.62	4.60	27.25
365.40	21.44	21.68	21.73	18.00	17.80	17.90	1.13	1.46	4.76	27.69
441.50	21.46	21.72	21.77	17.50	17.50	17.30	1.13	1.37	4.82	27.74
517.70	21.48	21.74	21.81	16.90	17.10	17.30	1.13	1.29	4.87	27.50
568.50	21.44	21.72	21.79	17.00	16.70	17.00	1.12	1.26	4.90	27.38
619.20	21.45	21.75	21.82	16.70	16.50	16.80	1.11	1.25	4.94	27.14
695.40	21.45	21.75	21.83	16.30	16.30	16.30	1.09	1.28	5.00	27.04
771.50	21.49	21.80	21.89	15.60	15.70	15.50	1.08	1.35	5.09	26.93
847.70	21.63	21.96	22.04	14.80	15.10	15.10	1.06	1.44	5.24	26.89
923.80	21.87	22.22	22.31	14.30	14.10	14.20	1.06	1.57	5.40	26.85
1000.00	21.89	22.28	22.38	13.40	13.30	13.30	1.11	1.92	5.57	26.47



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