

Coaxial Amplifier

ZHL-1-2W

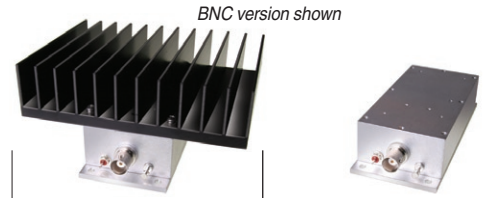
50Ω High Power 2W 5 to 500 MHz

Features

- wideband, 5 to 500 MHz
- high power output, +33 dBm min.
- high gain, +29 dB min.
- high IP3, +44 dBm typ.
- good matching VSWR, 1.5:1

Applications

- VHF/UHF
- instrumentation
- laboratory



Connectors	Model no.	Price	Qty.	Model no.	Price	Qty.
BNC	ZHL-1-2W	\$ 525.00	(1-9)	ZHL-1-2WX	\$ 475.00	(1-9)
SMA	ZHL-1-2W-S	\$ 535.00	(1-9)	ZHL-1-2WX-S	\$ 485.00	(1-9)
N-TYPE	ZHL-1-2W-N	\$ 535.00	(1-9)	ZHL-1-2WX-N	\$ 485.00	(1-9)

Electrical Specifications

MODEL NO.	FREQ. (MHz)		GAIN (dB)		MAXIMUM POWER OUTPUT (dBm)		DYNAMIC RANGE		VSWR (-1) Typ.		DC POWER	
	f _L	f _U	Min.	Flatness Max.	(1 dB Compr.) Min.	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (A) Max.
ZHL-1-2W	5	500	29	±1.0	+33	+10	12	+44	1.5	1.5	24	0.9
ZHL-1-2WX*	5	500	29	±1.0	+33	+10	12	+44	1.5	1.5	24	0.9

*Heat sink not included

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

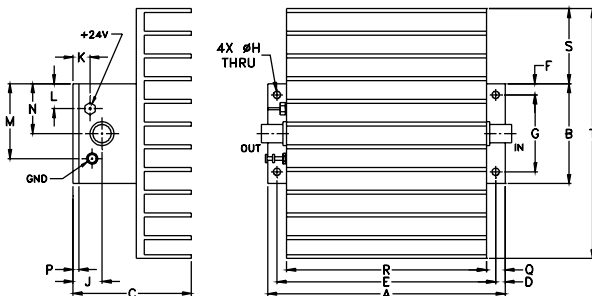
To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum temperature to 65°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.0°C/W Max.

Maximum Ratings

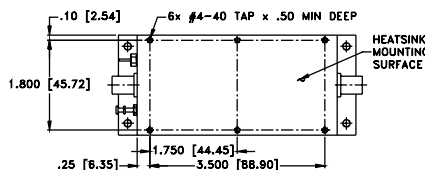
Operating Temperature	-20°C to 65°C
Storage Temperature	-55°C to 100°C
DC Voltage	+25V Max.

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

Outline Drawing



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt
4.75	2.00	2.37	.19	4.375	.23	1.540	.144	.58	.34	.50	1.50	1.00	.12	.38	4.00	1.50	5.0	grams*
120.65	50.80	60.20	4.83	111.13	5.84	39.12	3.66	14.73	8.64	12.70	38.10	25.40	3.05	9.65	101.60	38.10	127.00	700

*300 grams without heatsink

Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

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-Circuit's 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.

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FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	P _{OUT} at 1 dB COMPR. (dBm)
	23V	24V	24.5V	23V	24V	24.5V	IN	OUT		
5.00	32.84	32.87	32.92	25.30	26.00	26.10	1.12	1.51		34.98
11.30	32.45	32.47	32.50	25.90	26.70	26.00	1.10	1.49	6.11	35.08
33.40	32.41	32.42	32.45	25.80	23.80	24.30	1.16	1.49	6.06	35.42
98.80	33.72	33.78	33.83	24.90	25.40	22.60	1.28	1.43	5.63	35.07
195.40	34.00	34.10	34.19	21.90	21.60	22.50	1.41	1.18	5.82	34.36
246.20	33.64	33.73	33.84	20.00	19.90	19.50	1.45	1.11	5.95	34.34
309.60	33.47	33.57	33.67	17.10	17.70	18.00	1.48	1.19	6.09	35.54
373.10	33.77	33.89	34.02	15.90	16.10	17.60	1.51	1.29	6.45	34.85
436.50	33.15	33.35	33.54	17.60	17.20	17.60	1.56	1.37	6.98	34.71
500.00	32.49	32.80	33.14	22.50	20.60	20.80	1.59	1.57	7.28	33.90

