

Coaxial Amplifier

ZHL-1-2W+

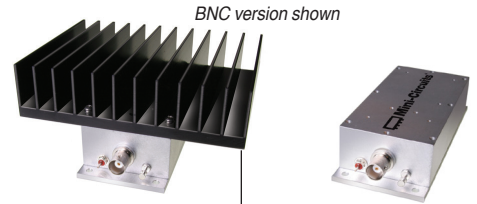
50Ω High Power 2W 5 to 500 MHz

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



CASE STYLE T35	Model no.	Model no.
Connectors		
BNC	ZHL-1-2W+	ZHL-1-2WX+
SMA	ZHL-1-2W-S+	ZHL-1-2WX-S+
N-TYPE	ZHL-1-2W-N+	ZHL-1-2WX-N+

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

Electrical Specifications at 25°C

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

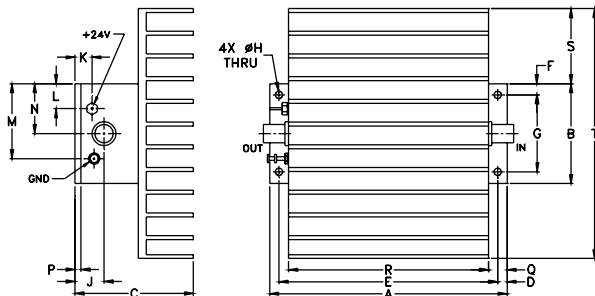
To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum base-plate temperature to 85°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.0°C/W Max.

Maximum Ratings

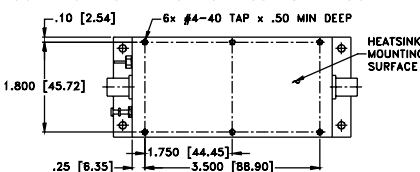
Operating Temperature	-20°C to 65°C
Storage Temperature	-55°C to 100°C
DC Voltage	+25V Max.

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	.13	.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	3.30	9.65	101.60	38.10	127.00	700

*300 grams without heatsink

Notes

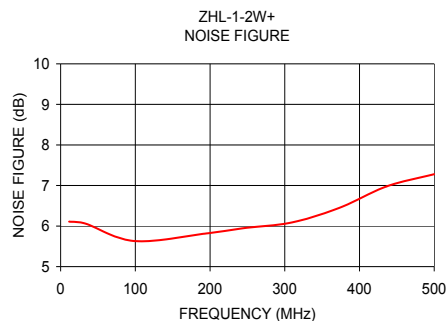
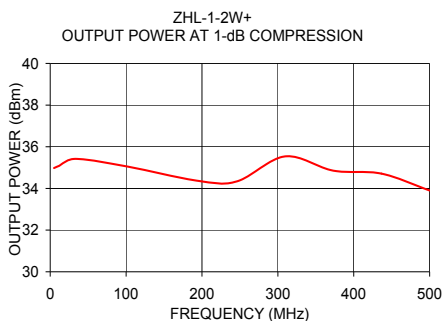
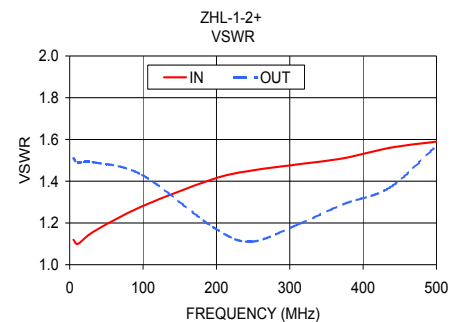
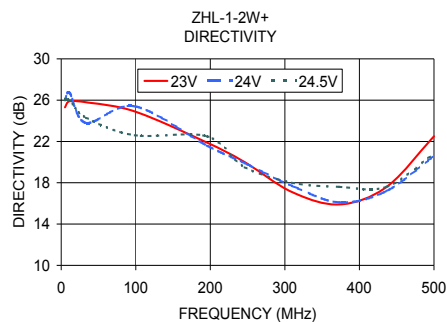
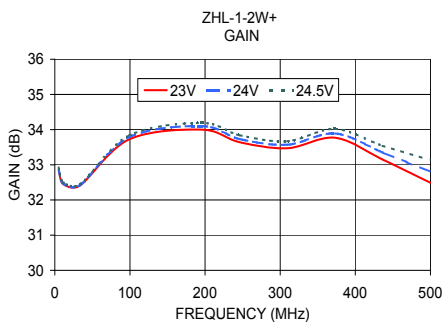
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ZHL-1-2W+
151005
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FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	P _{OUT} at 1 dB COMPR. (dBm)
	23V	24V	24.5V	23V	24V	24.5V	IN	OUT		
5.00	32.84	32.87	32.92	25.30	26.00	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



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