

# Coaxial Amplifier

## ZHL-2-12

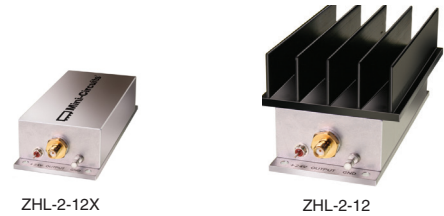
50Ω Medium High Power 10 to 1200 MHz

### Features

- wideband, 10 to 1200 MHz
- high dynamic range
- low noise, 4 dB typ
- high IP3, +38 dBm typ.

### Applications

- VHF/UHF
- cellular
- instrumentation
- laboratory



ZHL-2-12X

ZHL-2-12

CASE STYLE: T34			
Connectors	Model	Price	Qty.
SMA	ZHL-2-12	\$625.00 ea	(1-9)
SMA	ZHL-2-12X	\$615.00 ea.	(1-9)

### Electrical Specifications

MODEL NO.	FREQ. (MHz)		GAIN (dB)		MAXIMUM POWER OUTPUT (dBm)		DYNAMIC RANGE		VSWR (:1) Max.		DC POWER	
	$f_L$	$f_U$	Min.	Max.	(1 dB Compr.)	Input (no damage)	NF (dB)	IP3 (dBm)	In	Out	Volt (V) Nom.	Current (A) Max.
			Flatness		Min. <sup>1</sup>		Typ. <sup>2</sup>	Typ.				
ZHL-2-12	10	1200	24	±1.0	+29	+10	4.0	+38	2.0	2.0	24	0.75
ZHL-2-12X*	10	1200	24	±1.0	+29	+10	4.0	+38	2.0	2.0	24	0.75

\* Heat sink not included

<sup>1</sup> +28.5 dBm minimum at 1000-1200 MHz

<sup>2</sup> Below 100 MHz Noise Figure increases to 16 dB 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 65°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.2°C/W Max.

### Maximum Ratings

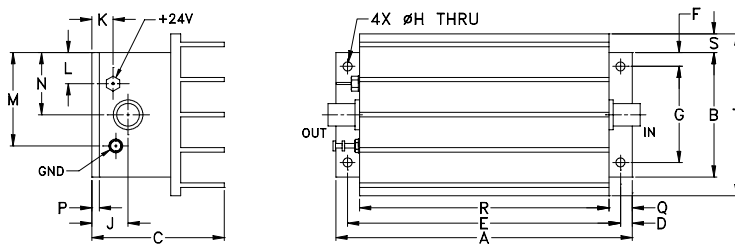
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

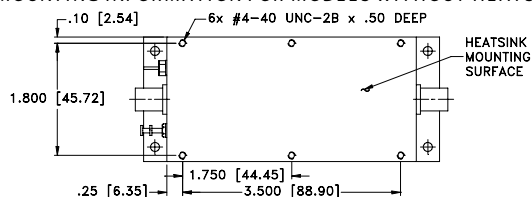
DC Voltage +25V Max.

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	2.12	.19	4.375	.23	1.540	.144	.58	.34	.50	1.50	1.00	.12	.38	4.00	.30	2.60	grams*
120.65	50.80	53.85	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	7.62	66.04	440.0

\*325 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.

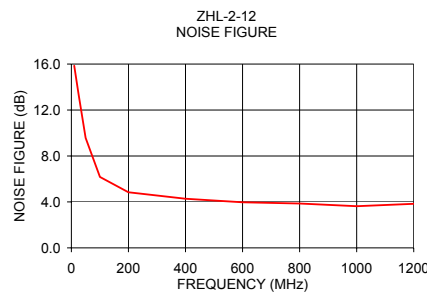
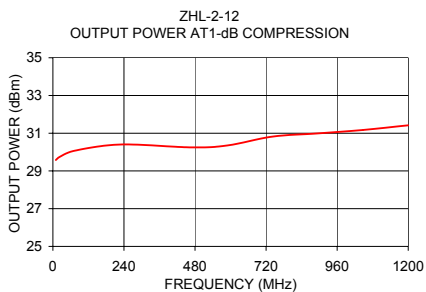
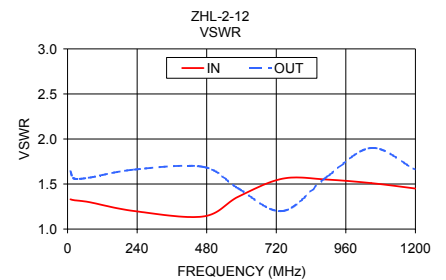
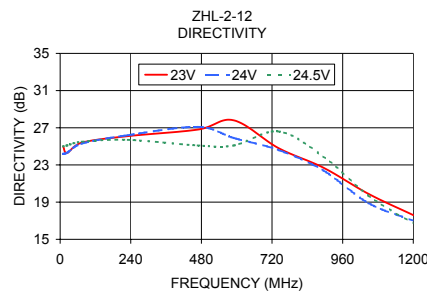
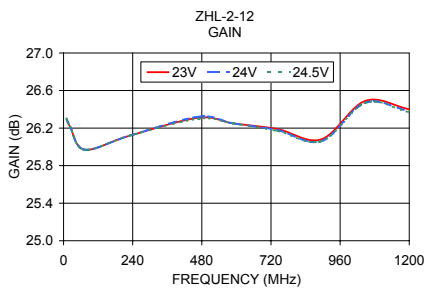
C. The parts covered by this specification document are subject to Mini-Circuits' standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



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

REV. B  
M124323  
ZHL-2-12  
140718  
Page 1 of 2

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		POUT 1 dB COMPR. (dBm)	FREQUENCY (MHz)	NOISE FIGURE (dB)
	23V	24V	24.5V	23V	24V	24.5V	IN	OUT			
10.00	26.29	26.30	26.30	25.00	24.20	25.00	1.33	1.64	29.58	10	15.9
23.50	26.21	26.21	26.21	24.30	24.30	25.10	1.32	1.56	29.75	25	13.4
73.50	25.97	25.97	25.97	25.40	25.30	25.50	1.30	1.57	30.07	50	9.6
230.00	26.12	26.12	26.12	26.10	26.20	25.70	1.20	1.66	30.40	100	6.2
467.70	26.31	26.32	26.30	26.80	27.10	25.10	1.14	1.69	30.25	200	4.8
589.70	26.25	26.25	26.25	27.80	25.90	25.10	1.36	1.45	30.35	400	4.3
742.30	26.19	26.18	26.17	24.80	24.60	26.60	1.56	1.20	30.82	600	4.0
894.90	26.08	26.06	26.06	22.70	22.40	23.90	1.55	1.58	30.99	800	3.9
1047.40	26.49	26.47	26.47	19.90	18.90	19.70	1.51	1.90	31.17	1000	3.6
1200.00	26.40	26.38	26.37	17.60	17.00	16.70	1.45	1.66	31.42	1250	3.9



**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](http://www.minicircuits.com/MCLStore/terms.jsp)

