

Coaxial Amplifier

ZHL-2

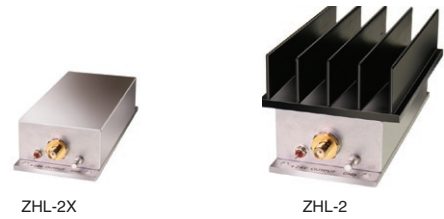
50Ω Medium High Power 10 to 1000 MHz

Features

- wideband, 10 to 1000 MHz
- high IP3, +38 dBm typ.
- medium high power, 29 dBm min.

Applications

- VHF/UHF
- cellular
- instrumentation
- laboratory



SMA version shown

| CASE STYLE: T34 | | | |
|-----------------|----------|--------------|-------|
| Connectors | Model | Price | Qty. |
| BNC | ZHL-2 | \$349.00 ea. | (1-9) |
| BNC | ZHL-2X | \$339.00 ea. | (1-9) |
| SMA | ZHL-2-S | \$359.00 ea. | (1-9) |
| SMA | ZHL-2X-S | \$349.00 ea. | (1-9) |
| N-TYPE | ZHL-2-N | \$359.00 ea. | (1-9) |
| N-TYPE | ZHL-2X-N | \$349.00 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. | Flatness Max. | Min. | Input (no damage) | NF (dB) Typ. | IP3 (dBm) Typ. | In | Out | Volt (V) Nom. | Current (A) Max. |
| | | | | | | | | | | | | |
| ZHL-2 | 10 | 1000 | 16 | ±1.0 | +29 | +15 | 9.0 | +38 | 2.0 | 2.0 | 24 | 0.6 |
| ZHL-2X* | 10 | 1000 | 16 | ±1.0 | +29 | +15 | 9.0 | +38 | 2.0 | 2.0 | 24 | 0.6 |

* 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 1.35°C/W Max.

Maximum Ratings

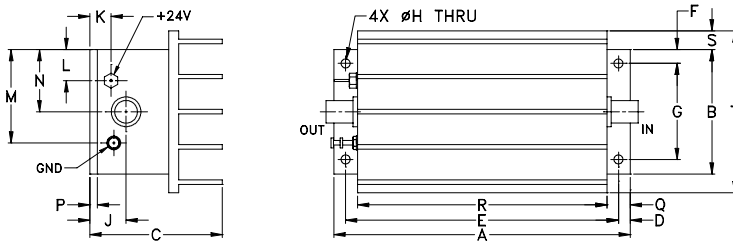
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

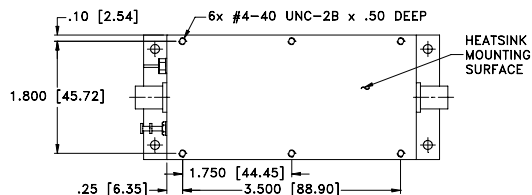
DC Voltage +25V Max.

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

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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| FREQ. (MHz) | GAIN (dB) | | | DIRECTIVITY (dB) | | | VSWR (:1) | | NOISE FIGURE (dB) | FREQ. (MHz) | P _{OUT} at 1 dB COMPR. (dBm) |
|----------------|--------------|-------|-------|---------------------|-------|-------|--------------|------|-------------------------|----------------|--|
| | 23V | 24V | 24.5V | 23V | 24V | 24.5V | IN | OUT | | | |
| 10.00 | 17.75 | 17.77 | 17.76 | 26.10 | 26.00 | 26.10 | 1.58 | 1.87 | 9.19 | 10 | 30.03 |
| 22.60 | 18.12 | 18.13 | 18.12 | 25.40 | 25.50 | 25.40 | 1.08 | 1.80 | 8.56 | 100 | 30.09 |
| 66.80 | 18.07 | 18.07 | 18.07 | 25.70 | 25.50 | 25.60 | 1.11 | 1.76 | 7.95 | 200 | 30.23 |
| 197.60 | 18.00 | 18.01 | 18.00 | 25.70 | 25.80 | 25.70 | 1.23 | 1.59 | 8.11 | 300 | 30.46 |
| 390.80 | 17.63 | 17.63 | 17.64 | 26.60 | 26.50 | 26.50 | 1.43 | 1.22 | 8.46 | 400 | 30.69 |
| 492.30 | 17.42 | 17.42 | 17.43 | 27.00 | 27.00 | 26.90 | 1.54 | 1.09 | 8.54 | 500 | 31.05 |
| 619.20 | 17.13 | 17.13 | 17.12 | 27.40 | 27.30 | 27.40 | 1.65 | 1.20 | 8.58 | 600 | 31.37 |
| 746.20 | 17.19 | 17.19 | 17.19 | 26.60 | 26.80 | 26.70 | 1.71 | 1.20 | 8.69 | 700 | 31.44 |
| 873.10 | 17.31 | 17.32 | 17.31 | 24.90 | 24.90 | 24.80 | 1.70 | 1.15 | 9.06 | 800 | 31.67 |
| 1000.00 | 17.84 | 17.83 | 17.85 | 21.90 | 22.00 | 21.80 | 1.39 | 1.26 | 9.69 | 1000 | 31.41 |

