

# Coaxial Amplifier

## ZHL-2

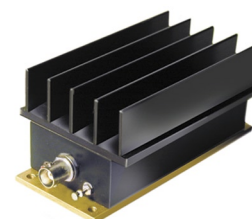
50Ω Medium High Power 10 to 1000 MHz

### Features

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

### Applications

- cellular
- VHF/UHF
- laboratory
- instrumentation



BNC version shown

CASE STYLE: T34

| Connectors | Model   | Price    | Qty.  |
|------------|---------|----------|-------|
| BNC        | ZHL-2   | \$349.00 | (1-9) |
| N-TYPE     | ZHL-2-N | \$359.00 | (1-9) |
| SMA        | ZHL-2-S | \$359.00 | (1-9) |

### Amplifier Electrical Specifications

| MODEL NO. | FREQUENCY (MHz) |       | GAIN (dB) |               | MAXIMUM POWER (dBm)       |                   | DYNAMIC RANGE |                | VSWR (:1) Max. |     | DC POWER      |                  |
|-----------|-----------------|-------|-----------|---------------|---------------------------|-------------------|---------------|----------------|----------------|-----|---------------|------------------|
|           | $f_L$           | $f_U$ | Min.      | Flatness Max. | Output (1 dB Compr. 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              |

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

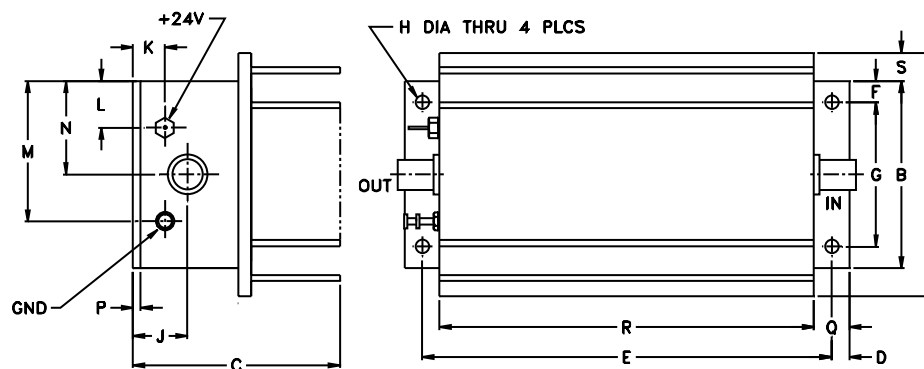
### Maximum Ratings

Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

DC Voltage +25V Max.

### Outline Drawing



### Outline Dimensions (inch/mm)

| A      | B     | C     | D     | E      | F    | G      | H    | J     |       |
|--------|-------|-------|-------|--------|------|--------|------|-------|-------|
| 4.75   | 2.00  | 2.12  | .19   | 4.375  | .23  | 1.540  | .144 | .58   |       |
| 120.65 | 50.80 | 53.85 | 4.83  | 111.13 | 5.84 | 39.12  | 3.66 | 14.73 |       |
| K      | L     | M     | N     | P      | Q    | R      | S    | T     | wt    |
| .34    | .50   | 1.50  | 1.00  | .12    | .38  | 4.00   | .30  | 2.60  | grams |
| 8.64   | 12.70 | 38.10 | 25.40 | 3.05   | 9.65 | 101.60 | 7.62 | 66.04 | 440.0 |



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REV. OR  
M98142  
ZHL-2  
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| FREQUENCY<br>(MHz) | GAIN<br>(dB) |       |       | DIRECTIVITY<br>(dB) |       |       | VSWR<br>(:1) |      | NOISE<br>FIGURE<br>(dB) | POUT at<br>1 dB COMPR.<br>(dBm) |
|--------------------|--------------|-------|-------|---------------------|-------|-------|--------------|------|-------------------------|---------------------------------|
|                    | 23V          | 24V   | 24.5V | 23V                 | 24V   | 24.5V | IN           | OUT  | 24V                     | 24V                             |
| 10.00              | 17.75        | 17.77 | 17.76 | 26.10               | 26.00 | 26.10 | 1.58         | 1.87 | 9.19                    | 30.71                           |
| 22.60              | 18.12        | 18.13 | 18.12 | 25.40               | 25.50 | 25.40 | 1.08         | 1.80 | 8.56                    | 30.73                           |
| 66.80              | 18.07        | 18.07 | 18.07 | 25.70               | 25.50 | 25.60 | 1.11         | 1.76 | 7.95                    | 30.87                           |
| 197.60             | 18.00        | 18.01 | 18.00 | 25.70               | 25.80 | 25.70 | 1.23         | 1.59 | 8.11                    | 31.07                           |
| 390.80             | 17.63        | 17.63 | 17.64 | 26.60               | 26.50 | 26.50 | 1.43         | 1.22 | 8.46                    | 30.68                           |
| 492.30             | 17.42        | 17.42 | 17.43 | 27.00               | 27.00 | 26.90 | 1.54         | 1.09 | 8.54                    | 30.19                           |
| 619.20             | 17.13        | 17.13 | 17.12 | 27.40               | 27.30 | 27.40 | 1.65         | 1.20 | 8.58                    | 29.67                           |
| 746.20             | 17.19        | 17.19 | 17.19 | 26.60               | 26.80 | 26.70 | 1.71         | 1.20 | 8.69                    | 29.40                           |
| 873.10             | 17.31        | 17.32 | 17.31 | 24.90               | 24.90 | 24.80 | 1.70         | 1.15 | 9.06                    | 29.40                           |
| 1000.00            | 17.84        | 17.83 | 17.85 | 21.90               | 22.00 | 21.80 | 1.39         | 1.26 | 9.69                    | 29.28                           |

