

Coaxial Amplifier

ZHL-1A

50Ω Medium High Power 2 to 500 MHz

Features

- wideband, 2 to 500 MHz
- high IP3, +38 dBm typ.
- medium high power, +28 dBm min.

Applications

- VHF/UHF
- test set-ups
- instrumentation



BNC version shown

CASE STYLE: S32

| Connectors | Model | Price | Qty. |
|------------|----------|----------|-------|
| BNC | ZHL-1A | \$229.00 | (1-9) |
| SMA | ZHL-1A-S | \$239.00 | (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. | (1 dB Compr.) Min. | Input (no damage) | NF (dB) Typ. | IP3 (dBm) Typ. | In | Out | Volt (V) Nom. | Current (A) Max. |
| ZHL-1A | 2 | 500 | 16 | ±1.0 | +28 | +20 | 11.0 | +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

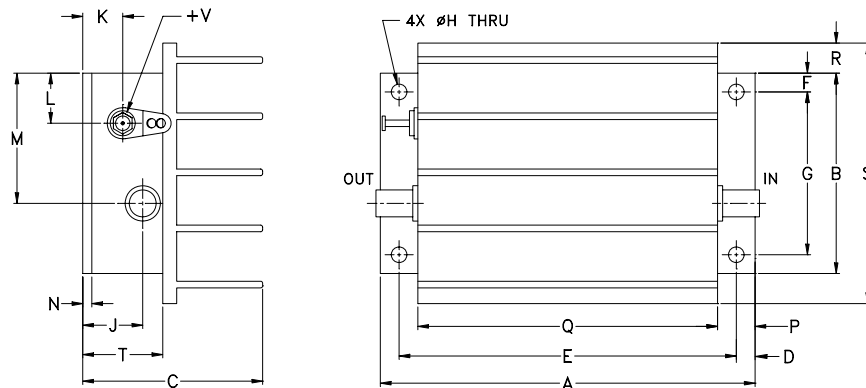
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

DC Voltage +24.5V Max.

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

Outline Drawing



Outline Dimensions (inch / mm)

| A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S | T | wt |
|-------|-------|-------|------|-------|------|-------|------|-------|-------|-------|-------|------|------|-------|------|-------|-------|-------|
| 3.75 | 2.00 | 1.80 | .19 | 3.375 | .19 | 1.625 | .144 | .50 | .40 | .50 | 1.30 | .10 | .38 | 3.00 | .30 | 2.60 | .80 | grams |
| 95.25 | 50.80 | 45.72 | 4.83 | 85.73 | 4.83 | 41.28 | 3.66 | 12.70 | 10.16 | 12.70 | 33.02 | 2.54 | 9.65 | 76.20 | 7.62 | 66.04 | 20.32 | 220.0 |

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

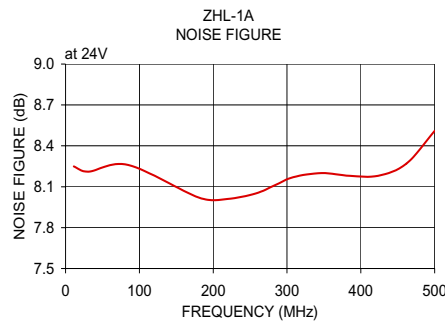
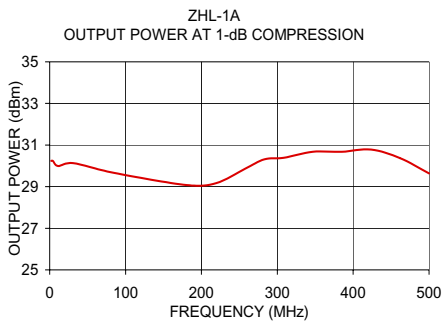
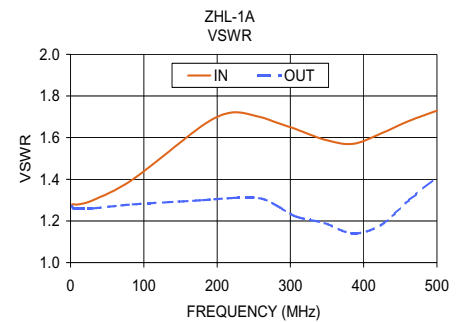
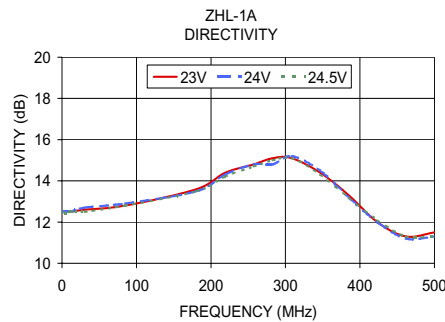
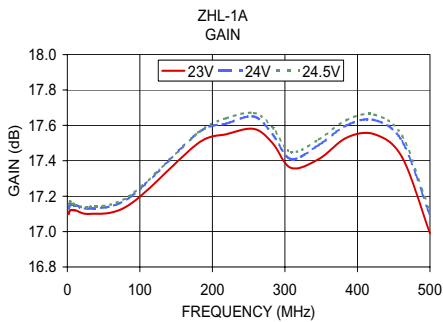
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| FREQUENCY (MHz) | GAIN (dB) | | | DIRECTIVITY (dB) | | | VSWR (:1) | | NOISE FIGURE (dB) | POUT at 1 dB COMPR. (dBm) |
|-----------------|-----------|-------|-------|------------------|-------|-------|-----------|------|-------------------|---------------------------|
| | 23V | 24V | 24.5V | 23V | 24V | 24.5V | IN | OUT | | |
| 2.00 | 17.10 | 17.13 | 17.15 | 12.50 | 12.50 | 12.50 | 1.28 | 1.27 | — | 30.24 |
| 4.00 | 17.12 | 17.15 | 17.17 | 12.50 | 12.50 | 12.40 | 1.28 | 1.26 | — | 30.24 |
| 11.00 | 17.12 | 17.15 | 17.15 | 12.50 | 12.50 | 12.50 | 1.28 | 1.26 | 8.25 | 29.99 |
| 30.60 | 17.10 | 17.13 | 17.14 | 12.60 | 12.70 | 12.50 | 1.30 | 1.26 | 8.21 | 30.13 |
| 85.00 | 17.15 | 17.19 | 17.20 | 12.80 | 12.90 | 12.80 | 1.40 | 1.28 | 8.26 | 29.66 |
| 180.80 | 17.50 | 17.56 | 17.56 | 13.60 | 13.50 | 13.50 | 1.66 | 1.30 | 8.02 | 29.08 |
| 219.10 | 17.55 | 17.61 | 17.64 | 14.40 | 14.30 | 14.20 | 1.72 | 1.31 | 8.01 | 29.17 |
| 257.40 | 17.58 | 17.65 | 17.67 | 14.80 | 14.80 | 14.70 | 1.70 | 1.31 | 8.05 | 29.86 |
| 282.90 | 17.50 | 17.55 | 17.59 | 15.10 | 14.80 | 15.00 | 1.67 | 1.27 | 8.11 | 30.31 |
| 308.50 | 17.36 | 17.41 | 17.45 | 15.10 | 15.20 | 15.10 | 1.64 | 1.22 | 8.17 | 30.39 |
| 346.80 | 17.41 | 17.49 | 17.52 | 14.40 | 14.50 | 14.30 | 1.59 | 1.19 | 8.20 | 30.68 |
| 385.10 | 17.53 | 17.60 | 17.63 | 13.30 | 13.20 | 13.20 | 1.57 | 1.14 | 8.18 | 30.68 |
| 423.40 | 17.55 | 17.63 | 17.66 | 12.00 | 12.00 | 12.10 | 1.62 | 1.18 | 8.18 | 30.78 |
| 461.70 | 17.42 | 17.51 | 17.54 | 11.30 | 11.20 | 11.30 | 1.68 | 1.30 | 8.27 | 30.37 |
| 500.00 | 16.99 | 17.09 | 17.11 | 11.50 | 11.30 | 11.30 | 1.73 | 1.41 | 8.51 | 29.64 |



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