

Coaxial Amplifier

ZHL-42W+ ZHL-42W

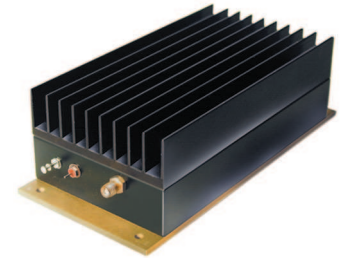
50Ω Medium High Power 10 to 4200 MHz

Features

- wideband, 10 to 4200 MHz
- high IP3, +38 dBm typ
- high gain, 30 dB min.

Applications

- communication systems
- instrumentation
- cellular
- laboratory



CASE STYLE: U36

| Connectors | Model | Price | Qty. |
|------------|------------|---------------|-------|
| SMA | ZHL-42W(+) | \$1095.00 ea. | (1-9) |

+RoHS Compliant

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

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-42W(+) | 10 | 4200 | 30 | ±1.5* | +28** | 0 | 8.0*** | +38 | 2.5 | 2.5 | 15 | 0.88 |

* Measured at 25°C

** +27 dBm at 10-700 MHz

*** Below 100 MHz NF increases to 15 dB at 10 MHz

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

Maximum Ratings

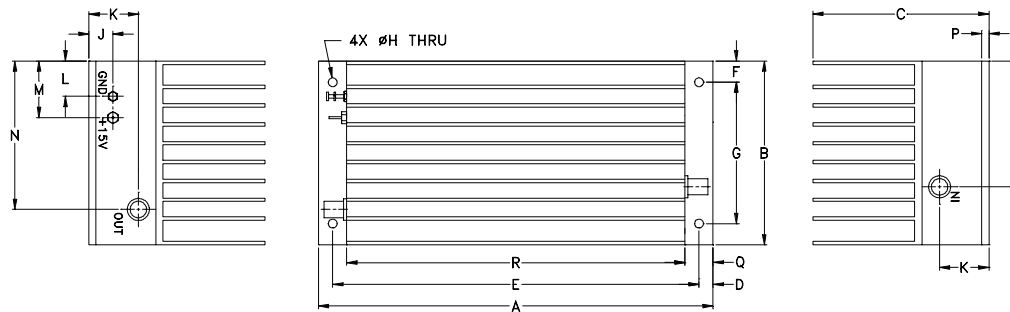
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

DC Voltage +20V 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 | wt |
|--------|-------|-------|------|--------|------|-------|------|-------|-------|-------|-------|-------|------|-------|--------|-------|-------|
| 7.00 | 3.25 | 2.13 | .25 | 6.500 | .38 | 2.500 | .156 | .73 | .88 | .63 | 1.13 | 2.23 | .125 | .50 | 6.00 | 2.23 | grams |
| 177.80 | 82.55 | 54.10 | 6.35 | 165.10 | 9.65 | 63.50 | 3.96 | 18.54 | 22.35 | 16.00 | 28.70 | 56.64 | 3.18 | 12.70 | 152.40 | 56.64 | 900 |

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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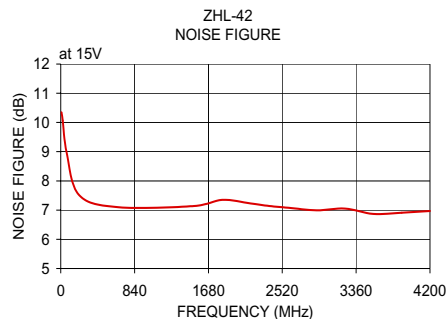
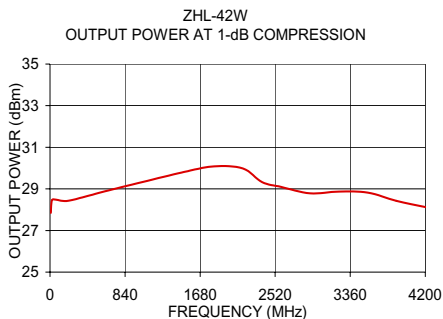
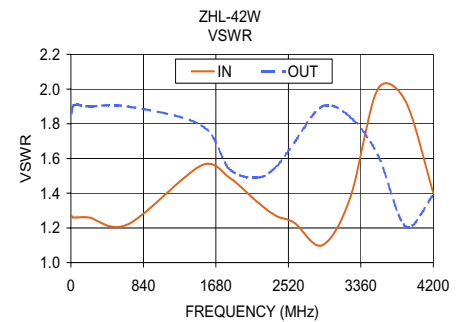
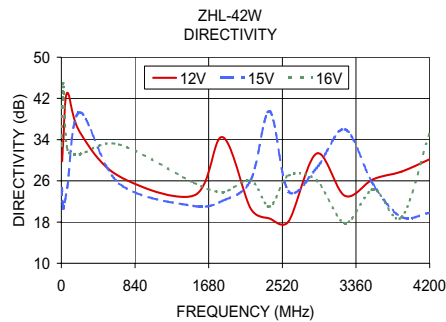
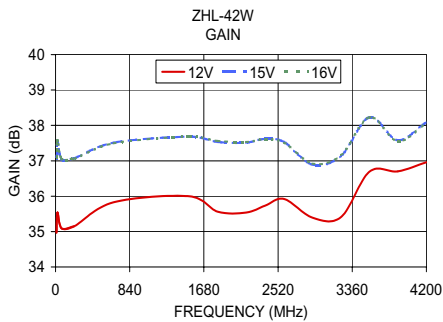
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REV. A
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Typical Performance Data/Curves

ZHL-42W+ ZHL-42W

| FREQUENCY (MHz) | GAIN (dB) | | | DIRECTIVITY (dB) | | | VSWR (:1) | | NOISE FIGURE (dB) | P _{OUT} at 1 dB COMPR. (dBm) |
|--------------------|--------------|-------|-------|---------------------|-------|-------|--------------|------|-------------------------|--|
| | 12V | 15V | 16V | 12V | 15V | 16V | IN | OUT | | |
| 10.00 | 34.97 | 37.07 | 37.10 | 29.80 | 24.60 | 32.90 | 1.27 | 1.86 | 10.35 | 27.85 |
| 21.40 | 35.54 | 37.56 | 37.57 | 33.70 | 20.60 | 45.00 | 1.26 | 1.90 | 10.07 | 28.46 |
| 67.00 | 35.09 | 37.04 | 37.06 | 43.10 | 24.60 | 32.20 | 1.26 | 1.91 | 8.96 | 28.48 |
| 209.90 | 35.15 | 37.07 | 37.06 | 35.50 | 39.30 | 31.20 | 1.26 | 1.90 | 7.51 | 28.43 |
| 657.20 | 35.83 | 37.51 | 37.49 | 26.90 | 25.50 | 33.10 | 1.22 | 1.90 | 7.10 | 28.93 |
| 1514.10 | 36.00 | 37.68 | 37.68 | 23.20 | 21.10 | 25.60 | 1.56 | 1.79 | 7.14 | 29.83 |
| 1836.40 | 35.56 | 37.53 | 37.56 | 34.50 | 22.10 | 23.80 | 1.49 | 1.54 | 7.35 | 30.08 |
| 2158.70 | 35.54 | 37.51 | 37.53 | 20.60 | 26.10 | 26.10 | 1.35 | 1.49 | 7.23 | 29.98 |
| 2373.60 | 35.73 | 37.62 | 37.61 | 18.70 | 39.50 | 21.00 | 1.27 | 1.55 | 7.14 | 29.32 |
| 2588.50 | 35.92 | 37.53 | 37.51 | 18.10 | 24.00 | 27.00 | 1.23 | 1.69 | 7.08 | 29.09 |
| 2910.80 | 35.39 | 36.89 | 36.92 | 31.30 | 28.50 | 26.10 | 1.10 | 1.90 | 6.99 | 28.79 |
| 3233.10 | 35.41 | 37.14 | 37.16 | 23.10 | 36.00 | 17.80 | 1.37 | 1.84 | 7.05 | 28.87 |
| 3555.40 | 36.69 | 38.23 | 38.23 | 26.30 | 25.30 | 24.30 | 2.00 | 1.62 | 6.87 | 28.82 |
| 3877.70 | 36.70 | 37.58 | 37.55 | 27.80 | 19.00 | 18.90 | 1.93 | 1.21 | 6.91 | 28.42 |
| 4200.00 | 36.96 | 38.09 | 38.07 | 30.20 | 19.80 | 35.40 | 1.40 | 1.39 | 6.97 | 28.13 |



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