

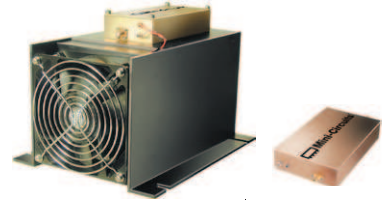
Coaxial High Power Amplifier

ZHL-10W-2G+

50Ω 10W 800 to 2000 MHz

Features

- High power, 10 Watt
- Low Current consumption, 4A typ.
- High IP3, +50 dBm typ.
- Usable over 700 to 2200 MHz
- No damage with an open or short output load under full CW output power



| | | |
|--------------|---------------------|---------------------|
| Model No. | ZHL-10W-2G+ | ZHL-10W-2GX+▲ |
| Case Style | BT1204 | |
| Connectors | SMA | |
| Price (Qty.) | \$1295.00 ea. (1-9) | \$1220.00 ea. (1-9) |

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Applications

- Cellular
- PCN
- GSM
- ISM
- Lab Test

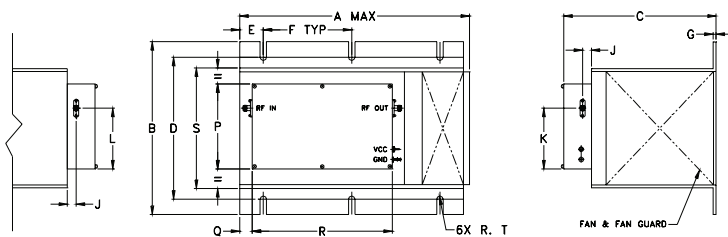
Electrical Specifications

| Parameter | ZHL-10W-2G+ | | | ZHL-10W-2GX+▲ | | | Units |
|---|-------------|------|------|---------------|------|------|-------|
| | Min. | Typ. | Max. | Min. | Typ. | Max. | |
| Frequency Range | 800 | | 2000 | 800 | | 2000 | MHz |
| Gain | 40 | 43 | 49 | 40 | 43 | 49 | dB |
| Gain Flatness | | | ±2.0 | | | ±2.0 | dB |
| Output Power at 1dB compression | +39 | +40 | | +39 | +40 | | dBm |
| Saturated Output Power at 3dB compression | +40 | +41 | | +40 | +41 | | dBm |
| Noise Figure | | 7.0 | | | 7.0 | | dB |
| Output third order intercept point | | +50 | | | +50 | | dBm |
| Input VSWR | | 1.3 | | | 1.3 | | :1 |
| Output VSWR | | 1.3 | | | 1.3 | | :1 |
| DC Supply Voltage | | 24 | | | 24 | | V |
| Supply Current ¹ | | | 5.0 | | | 5.0 | A |

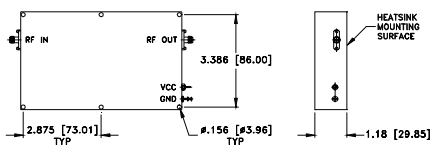
1. Power Supply should be capable of delivering 6A at start up.

▲ Heat sink and fan not included. Alternative heat sinking and heat removal must be provided by the user to limit maximum base-plate temperature to 75°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 0.08°C/W max.

Outline Drawing



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Maximum Ratings

| Parameter | Ratings |
|----------------------------|----------------|
| Operating Temperature | -20°C to 65°C |
| Storage Temperature | -55°C to 100°C |
| Base Plate Temperature | 75°C |
| Input RF Power (no damage) | +1 dBm |

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

Outline Dimensions (inch)

| A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S | T | wt |
|--------|--------|--------|--------|-------|-------|------|---|------|-------|-------|---|---|-------|-------|--------|--------|------|-------|
| 9.85 | 7.3 | 6.5 | 6.00 | 1.00 | 3.75 | .13 | — | .37 | 2.56 | 2.56 | — | — | 3.58 | .5 | 5.95 | 5.1 | .135 | grams |
| 250.19 | 185.42 | 165.10 | 152.40 | 25.40 | 95.25 | 3.30 | — | 9.40 | 65.02 | 65.02 | — | — | 90.93 | 12.70 | 151.13 | 129.54 | 3.43 | 4265 |

*580 grams without heatsink



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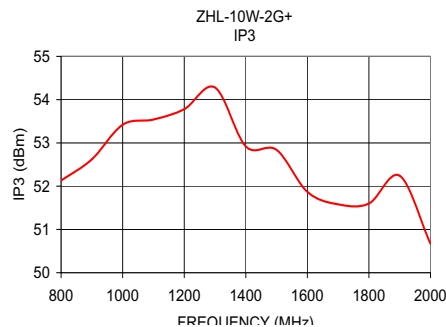
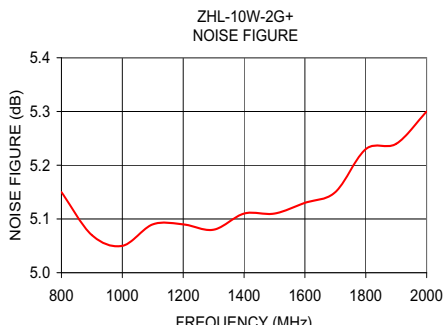
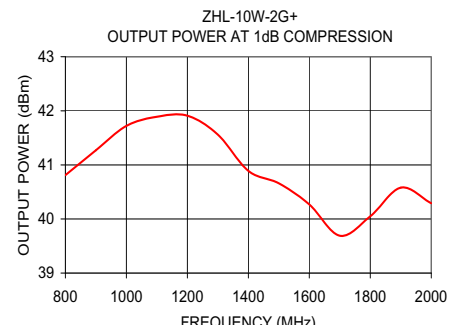
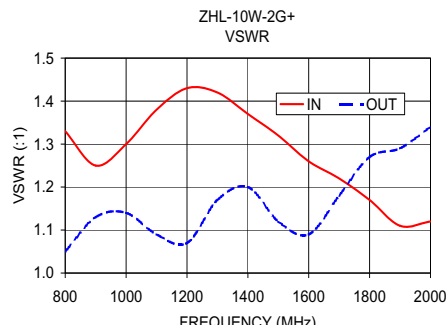
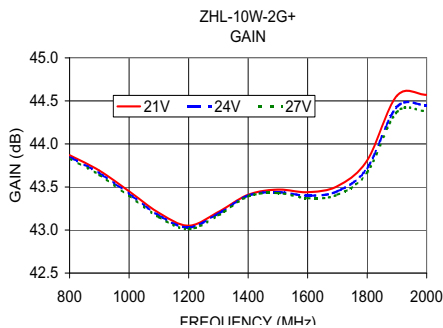
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For detailed performance specs & shopping online see web site

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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| FREQUENCY (MHz) | GAIN (dB) | | | VSWR (:1) | | NOISE FIGURE (dB) | POUT at 1 dB COMPR. (dBm) | IP3 (dBm) |
|-----------------|-----------|-------|-------|-----------|------|-------------------|---------------------------|-----------|
| | 21V | 24V | 27V | IN | OUT | | | |
| 800.00 | 43.87 | 43.85 | 43.83 | 1.33 | 1.05 | 5.15 | 40.81 | 52.13 |
| 900.00 | 43.69 | 43.66 | 43.64 | 1.25 | 1.13 | 5.07 | 41.27 | 52.62 |
| 1000.00 | 43.45 | 43.42 | 43.40 | 1.30 | 1.14 | 5.05 | 41.72 | 53.42 |
| 1100.00 | 43.20 | 43.17 | 43.15 | 1.38 | 1.09 | 5.09 | 41.89 | 53.54 |
| 1200.00 | 43.05 | 43.03 | 43.01 | 1.43 | 1.07 | 5.09 | 41.91 | 53.78 |
| 1300.00 | 43.21 | 43.19 | 43.17 | 1.42 | 1.17 | 5.08 | 41.56 | 54.28 |
| 1400.00 | 43.41 | 43.40 | 43.39 | 1.37 | 1.20 | 5.11 | 40.89 | 52.92 |
| 1500.00 | 43.47 | 43.44 | 43.43 | 1.32 | 1.12 | 5.11 | 40.66 | 52.84 |
| 1600.00 | 43.44 | 43.40 | 43.37 | 1.26 | 1.09 | 5.13 | 40.27 | 51.87 |
| 1700.00 | 43.51 | 43.45 | 43.41 | 1.22 | 1.18 | 5.15 | 39.69 | 51.58 |
| 1800.00 | 43.81 | 43.72 | 43.67 | 1.17 | 1.27 | 5.23 | 40.05 | 51.60 |
| 1900.00 | 44.56 | 44.43 | 44.37 | 1.11 | 1.29 | 5.24 | 40.58 | 52.24 |
| 2000.00 | 44.57 | 44.45 | 44.38 | 1.12 | 1.34 | 5.30 | 40.29 | 50.67 |



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