

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

**Visit our website - *Click HERE***

COAXIAL

# Medium High Power Amplifier ZHL-32A+

50Ω 0.05 to 130 MHz

## FEATURES

- Medium High Power, +29 dBm min.
- High IP3, +38 dBm typ.



*Generic photo used for illustration purposes only*

## APPLICATIONS

- HF/VHF
- Instrumentation
- Communication Systems
- Laboratory

| Model No. | ZHL-32A+ | ZHL-32A-S+ |
|---|---|---|
| Case Style | S32 | |
| Connectors | BNC | SMA |

**+RoHS Compliant**
The +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

## ELECTRICAL SPECIFICATIONS

| Parameter | Frequency (MHz) | Min. | Typ. | Max. | Units |
|---|---|---|---|---|---|
| Frequency Range | | 0.05 | | 130 | MHz |
| Gain | 0.05 - 130 | 25 | | | dB |
| Gain Flatness | 0.05 - 130 | | | ±1.0 | dB |
| Output Power at 1dB compression | 0.05 - 130 | +29 | | | dBm |
| Output third order intercept point | 0.05 - 130 | | +38 | | dBm |
| Noise Figure | 0.05 - 130 | | 10 | | dB |
| Input VSWR | 0.05 - 130 | | 2.0 | | :1 |
| Output VSWR | 0.05 - 130 | | 2.0 | | :1 |
| DC Supply Voltage | | | +24 | | V |
| Supply Current | | | | 0.6 | A |

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

## ABSOLUTE MAXIMUM RATINGS

| Parameter | Ratings |
|---|---|
| Operating Temperature | -20°C to +65°C |
| Storage Temperature | -55°C to +100°C |
| DC Voltage | +25V Max. |
| RF Input Power (no damage) | +10 dBm |

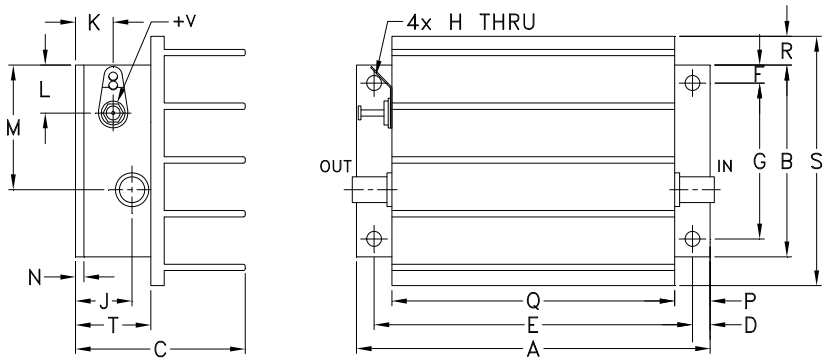
Permanent damage may occur if any of these limits are exceeded.

REV. F
ECO-017949
ZHL-32A+
MCL NY
230524

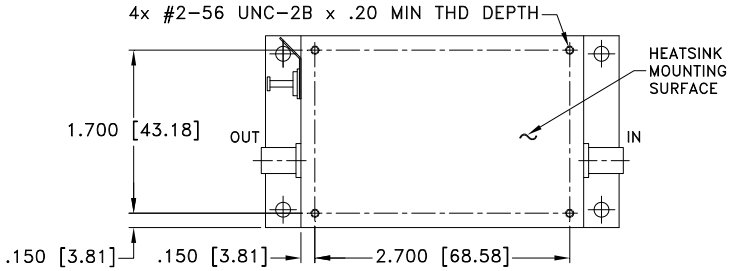
# Medium High Power Amplifier ZHL-32A+

50Ω 0.05 to 130 MHz

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| | | | | | | | | | | | | | | | wt. w/o heat sink | | | 150 |

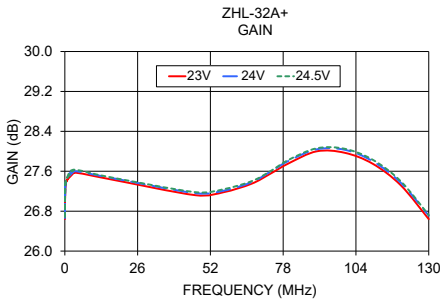
COAXIAL

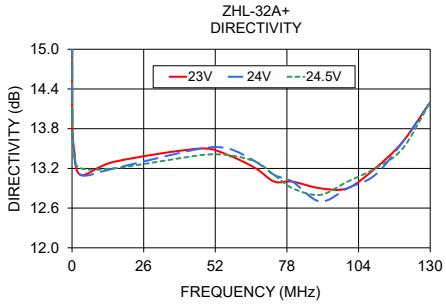
# Medium High Power Amplifier ZHL-32A+

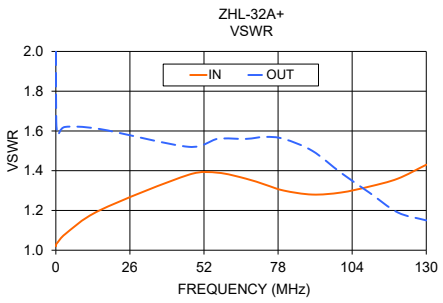
50Ω 0.05 to 130 MHz

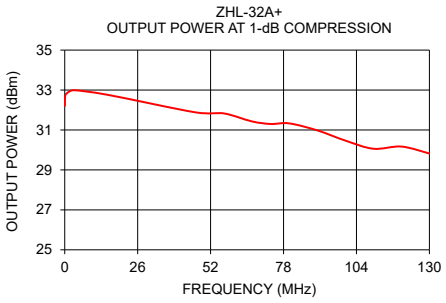
## TYPICAL PERFORMANCE DATA/CURVES

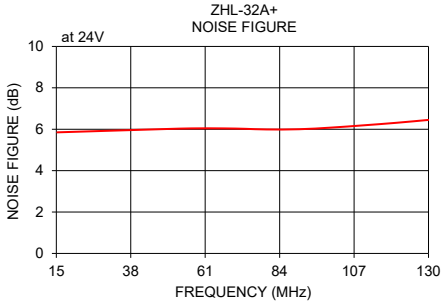
| FREQUENCY (MHz) | GAIN (dB) | | | DIRECTIVITY (dB) | | | VSWR (:1) | | NOISE FIGURE (dB) | POUT at 1 dB COMPR. (dBm) |
|---|---|---|---|---|---|---|---|---|---|---|
| | 23V | 24V | 24.5V | 23V | 24V | 24.5V | IN | OUT | 24V | 24V |
| 0.05 | 26.65 | 26.67 | 26.69 | 15.10 | 15.10 | 15.10 | 1.02 | 2.00 | - | 32.21 |
| 0.14 | 27.27 | 27.30 | 27.31 | 13.80 | 13.80 | 13.80 | 1.03 | 1.65 | - | 32.68 |
| 0.68 | 27.41 | 27.44 | 27.45 | 13.50 | 13.50 | 13.40 | 1.04 | 1.58 | - | 32.83 |
| 3.20 | 27.57 | 27.60 | 27.63 | 13.10 | 13.10 | 13.20 | 1.08 | 1.62 | - | 32.99 |
| 15.30 | 27.45 | 27.48 | 27.49 | 13.30 | 13.20 | 13.20 | 1.20 | 1.61 | 5.85 | 32.76 |
| 46.70 | 27.12 | 27.16 | 27.18 | 13.50 | 13.50 | 13.40 | 1.38 | 1.52 | 6.00 | 31.88 |
| 56.70 | 27.18 | 27.21 | 27.24 | 13.40 | 13.50 | 13.40 | 1.39 | 1.56 | 6.04 | 31.83 |
| 66.70 | 27.35 | 27.38 | 27.40 | 13.20 | 13.30 | 13.30 | 1.36 | 1.56 | 6.04 | 31.43 |
| 73.40 | 27.55 | 27.59 | 27.60 | 13.00 | 13.10 | 13.10 | 1.33 | 1.57 | 6.02 | 31.30 |
| 80.00 | 27.76 | 27.81 | 27.83 | 13.00 | 13.00 | 12.90 | 1.30 | 1.56 | 5.99 | 31.33 |
| 90.00 | 28.00 | 28.04 | 28.06 | 12.90 | 12.70 | 12.80 | 1.28 | 1.50 | 6.00 | 30.98 |
| 100.00 | 27.97 | 28.03 | 28.05 | 12.90 | 12.90 | 13.00 | 1.29 | 1.39 | 6.08 | 30.47 |
| 110.00 | 27.75 | 27.80 | 27.83 | 13.20 | 13.10 | 13.20 | 1.32 | 1.29 | 6.19 | 30.06 |
| 120.00 | 27.32 | 27.37 | 27.40 | 13.60 | 13.60 | 13.50 | 1.36 | 1.19 | 6.31 | 30.17 |
| 130.00 | 26.64 | 26.71 | 26.72 | 14.20 | 14.20 | 14.20 | 1.43 | 1.15 | 6.45 | 29.82 |




NOTES

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document 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/terms/viewterm.html

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP