

Coaxial Amplifier

ZFL-1000VH2+

50Ω Medium Power 10 to 1000 MHz

Features

- wideband, 10 to 1000 MHz
- low noise, 5 dB typ.
- high gain, 28 dB typ.
- protected by US Patent, 6,943,629

Applications

- cellular
- VHF/UHF
- communication systems
- instrumentation



ZFL-1000VH2X+



ZFL-1000VH2+

CASE STYLE: SS98

| Connectors | Model |
|----------------------|---------------|
| SMA | ZFL-1000VH2+ |
| BRACKET (OPTION "B") | |
| SMA | ZFL-1000VH2X+ |

+RoHS Compliant

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

Amplifier Electrical Specifications

| MODEL NO. | FREQUENCY (MHz) | | GAIN (dB) | | | MAXIMUM POWER (dBm) | | DYNAMIC RANGE | | VSWR (:1) Typ. | | DC POWER | |
|----------------|-----------------|----------------|-----------|------|---------------|----------------------|-------------------|---------------|----------------|----------------|-----|---------------|-------------------|
| | f _L | f _u | Typ. | Min. | Flatness Max. | Output (1 dB Compr.) | Input (no damage) | NF (dB) Typ. | IP3 (dBm) Typ. | In | Out | Volt (V) Nom. | Current (mA) Max. |
| ZFL-1000VH2+ | 10 | 1000 | 28 | 26 | ±1.0 | +25 | +15 | 5.0 | +38 | 1.4 | 2.0 | 15 | 320 |
| ZFL-1000VH2X+* | 10 | 1000 | 28 | 26 | ±1.0 | +25 | +15 | 5.0 | +38 | 1.4 | 2.0 | 15 | 320 |

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

To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum temperature to 71°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 8°C/W Max.

Maximum Ratings

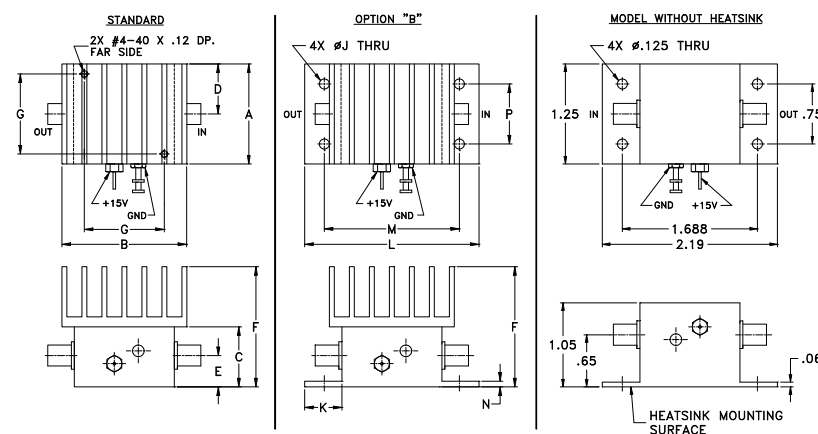
Operating Temperature -20°C to 71°C

Storage Temperature -55°C to 100°C

DC Voltage +17V 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 | wt* |
|-------|-------|-------|-------|------|-------|-------|----|------|-------|-------|-------|------|-------|-------|
| 1.25 | 1.56 | .75 | .63 | .39 | 1.50 | 1.000 | -- | .125 | .46 | 2.19 | 1.688 | .06 | .750 | grams |
| 31.75 | 39.62 | 19.05 | 16.00 | 9.91 | 38.10 | 25.40 | -- | 3.18 | 11.68 | 55.63 | 42.88 | 1.52 | 19.05 | 85.0 |

*70 grams without heat sink

Notes

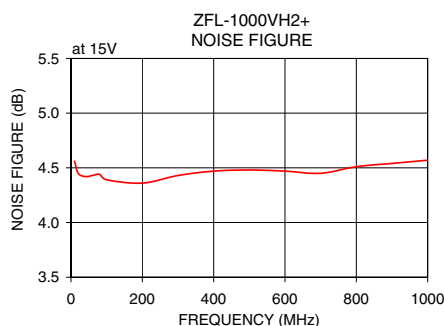
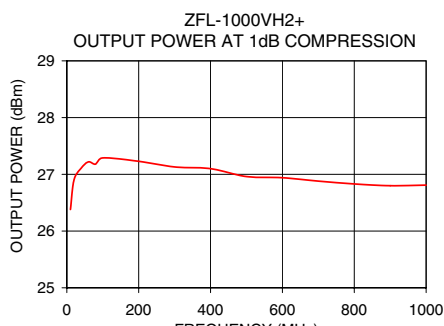
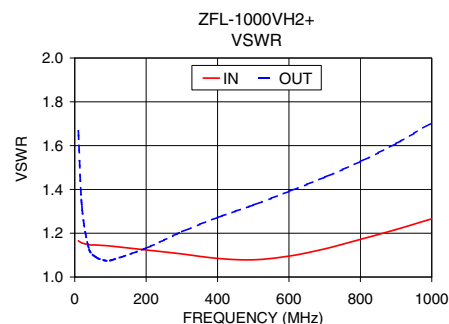
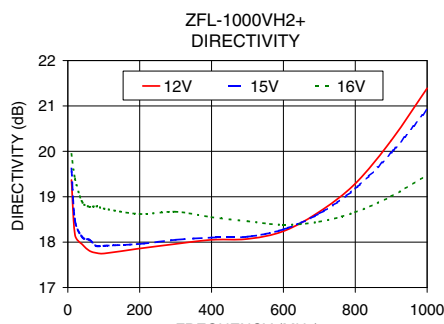
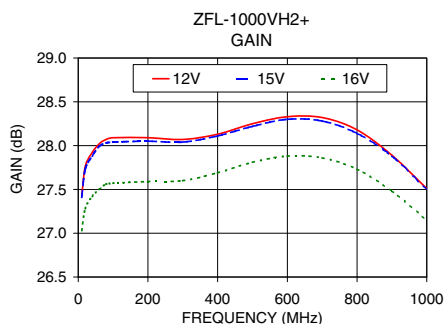
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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| FREQUENCY (MHz) | GAIN (dB) | | | DIRECTIVITY (dB) | | | VSWR (:1) | | NOISE FIGURE (dB) | POUT at 1 dB COMPR. (dBm) |
|-----------------|-----------|-------|-------|------------------|-------|-------|-----------|------|-------------------|---------------------------|
| | 12V | 15V | 16V | 12V | 15V | 16V | IN | OUT | | |
| 10.00 | 27.42 | 27.41 | 27.03 | 19.37 | 19.62 | 19.94 | 1.17 | 1.67 | 4.56 | 26.38 |
| 20.00 | 27.76 | 27.73 | 27.28 | 18.16 | 18.47 | 19.40 | 1.16 | 1.32 | 4.45 | 26.90 |
| 40.00 | 27.92 | 27.88 | 27.42 | 17.95 | 18.11 | 18.88 | 1.15 | 1.13 | 4.42 | 27.11 |
| 60.00 | 28.02 | 27.99 | 27.50 | 17.81 | 18.05 | 18.78 | 1.15 | 1.09 | 4.43 | 27.22 |
| 80.00 | 28.07 | 28.03 | 27.56 | 17.76 | 17.91 | 18.79 | 1.14 | 1.08 | 4.44 | 27.18 |
| 100.00 | 28.09 | 28.04 | 27.57 | 17.75 | 17.92 | 18.74 | 1.14 | 1.08 | 4.39 | 27.29 |
| 200.00 | 28.09 | 28.05 | 27.59 | 17.86 | 17.96 | 18.62 | 1.12 | 1.13 | 4.36 | 27.23 |
| 300.00 | 28.07 | 28.04 | 27.60 | 17.96 | 18.05 | 18.67 | 1.11 | 1.21 | 4.43 | 27.13 |
| 400.00 | 28.13 | 28.11 | 27.69 | 18.05 | 18.10 | 18.55 | 1.08 | 1.27 | 4.47 | 27.10 |
| 500.00 | 28.25 | 28.22 | 27.81 | 18.07 | 18.12 | 18.46 | 1.08 | 1.33 | 4.48 | 26.96 |
| 600.00 | 28.33 | 28.30 | 27.88 | 18.24 | 18.28 | 18.38 | 1.10 | 1.39 | 4.47 | 26.94 |
| 700.00 | 28.32 | 28.28 | 27.86 | 18.67 | 18.63 | 18.45 | 1.13 | 1.46 | 4.45 | 26.88 |
| 800.00 | 28.18 | 28.14 | 27.73 | 19.29 | 19.18 | 18.66 | 1.17 | 1.53 | 4.51 | 26.83 |
| 900.00 | 27.89 | 27.88 | 27.48 | 20.24 | 19.97 | 19.01 | 1.22 | 1.61 | 4.54 | 26.80 |
| 1000.00 | 27.51 | 27.50 | 27.15 | 21.39 | 20.92 | 19.48 | 1.27 | 1.70 | 4.57 | 26.81 |



Notes

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