*Coaxial*

# Low Noise Amplifier

## ZFL-1000LN+

50Ω 0.1 to 1000 MHz

CASE STYLE: Y460

| Connectors | Model | Price | Qty. |
|---|---|---|---|
| **SMA** | ZFL-1000LN+ | $89.95 | (1-9) |
| **BRACKET (OPTION "B")** | | $2.50 | (1+) |

*+ 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.*

### Features

- wideband, 0.1 to 1000 MHz
- low noise, 2.9 dB typ.
- protected by US Patent, 6,943,629

### Applications

- VHF/UHF
- cellular
- small signal amplifier

### Low Noise Amplifier Electrical Specifications

| MODEL NO. | FREQUENCY (MHz) | | NOISE FIGURE (dB) | GAIN (dB) | | MAXIMUM POWER (dBm) | | INTERCEPT POINT (dBm) | VSWR (:1) Typ. | | DC POWER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Flatness Max. | | | | | | | |
| | $f_L$ | $f_U$ | Typ. | Min. | Total Range | Output (1 dB Compr.) | Input (no damage) | IP3 Typ. | In | Out | Volt (V) Nom. | Current (mA) Max. |
| ZFL-1000LN+ | 0.1 | 1000 | 2.9 | 20 | ±0.5 | +3 | +5 | +14 | 1.5 | 2.0 | 15 | 60 |

m = mid range [2 fL to fU/2]

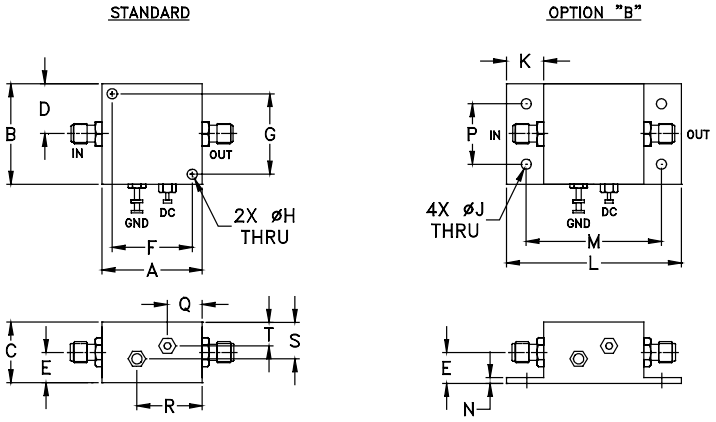
Open load is not recommended, potentially can cause damage.
With no load derate max input power by 20 dB

### Maximum Ratings

| | |
|---|---|
| Operating Temperature | -20°C to 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 | Q | R | S | T | wt. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.25 | 1.25 | .75 | .63 | .36 | 1.000 | 1.000 | .125 | .125 | .46 | 2.18 | 1.688 | .06 | .750 | .50 | .80 | .45 | .29 | grams |
| 31.75 | 31.75 | 19.05 | 16.00 | 9.14 | 25.40 | 25.40 | 3.18 | 3.18 | 11.68 | 55.37 | 42.88 | 1.52 | 19.05 | 12.70 | 20.32 | 11.43 | 7.37 | 38 |

# Typical Performance Data/Curves

# ZFL-1000LN+

| 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 | 15V | 15V |
| 0.10 | 19.66 | 23.31 | 23.96 | 29.30 | 27.50 | 27.90 | 1.28 | 1.19 | — | 4.76 |
| 0.70 | 19.90 | 23.56 | 24.24 | 28.80 | 27.10 | 26.90 | 1.11 | 1.13 | — | 4.95 |
| 7.90 | 19.89 | 23.55 | 24.21 | 28.60 | 27.10 | 27.20 | 1.11 | 1.13 | — | 5.02 |
| 95.70 | 19.91 | 23.50 | 24.14 | 28.50 | 27.20 | 26.70 | 1.11 | 1.14 | 2.98 | 4.91 |
| 384.70 | 19.69 | 23.21 | 23.81 | 25.90 | 24.80 | 24.10 | 1.07 | 1.26 | 3.07 | 6.08 |
| 487.20 | 20.16 | 23.42 | 23.97 | 25.00 | 23.50 | 22.80 | 1.08 | 1.30 | 3.09 | 6.60 |
| 615.40 | 20.48 | 23.49 | 24.02 | 22.80 | 21.30 | 21.30 | 1.09 | 1.36 | 3.08 | 7.14 |
| 743.60 | 20.81 | 23.65 | 24.11 | 21.30 | 19.80 | 19.30 | 1.05 | 1.45 | 3.05 | 7.47 |
| 871.80 | 20.79 | 23.50 | 23.96 | 19.50 | 18.20 | 17.40 | 1.03 | 1.57 | 3.07 | 7.43 |
| 1000.00 | 20.84 | 23.32 | 23.66 | 18.10 | 16.60 | 16.20 | 1.06 | 1.71 | 3.11 | 7.00 |