

# Coaxial Low Noise Amplifier

## ZQL-900LN+

50Ω 824 to 849 MHz

### Features

- very low noise, 1.3 dB max.
- high IP3, +35 dBm typ.
- rugged, shielded case

### Applications

- UHF
- communications systems
- cellular



CASE STYLE: CW686

| Connectors | Model      | Price        | Qty.  |
|------------|------------|--------------|-------|
| SMA        | ZQL-900LN+ | \$229.00 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.*

### 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 |     |
|------------|-----------------|-------|-------------------|-----------|------|---------------------|---------------------------|-----------------------|-------------------|----------|----------|-----|
|            | $f_L$           | $f_U$ |                   | Max.      | Min. | Flatness Max.       | Output (1 dB Compr.) Typ. |                       | Input (no damage) | IP3 Typ. | In       | Out |
| ZQL-900LN+ | 824             | 849   | 1.3               | 15        | ±0.5 | +21                 | +10                       | +35                   | 1.2               | 1.1      | 15       | 160 |

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

### Maximum Ratings

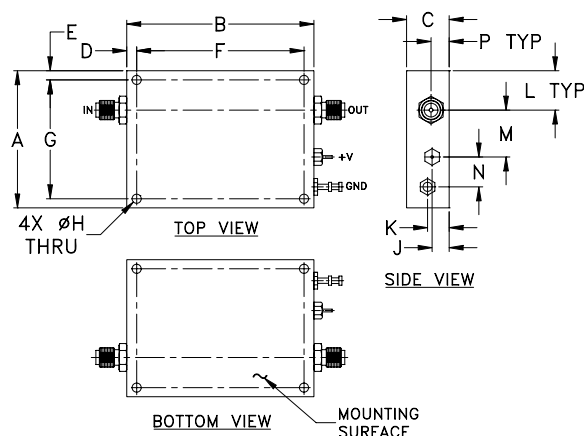
Operating Temperature -40°C to 70°C

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    |
|-------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|------|------|-------|
| 1.77  | 2.42  | .55   | .13  | .12  | 2.165 | 1.535 | .126 | .22  | .28  | .51   | .61   | .39  | 0.22 | grams |
| 44.96 | 61.47 | 13.97 | 3.30 | 3.05 | 55.0  | 39.0  | 3.20 | 5.59 | 7.11 | 12.95 | 15.49 | 9.91 | 5.59 | 71.0  |



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

**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](http://www.minicircuits.com/MCLStore/terms.jsp).

| FREQUENCY (MHz) | GAIN (dB) | DIRECTIVITY (dB) | VSWR (:1) |      | NOISE FIGURE (dB) | POUT at 1 dB COMPR. (dBm) |
|-----------------|-----------|------------------|-----------|------|-------------------|---------------------------|
|                 | 15V       |                  | IN        | OUT  |                   |                           |
| 824.00          | 16.93     | 6.75             | 1.09      | 1.15 | 0.96              | 23.01                     |
| 826.00          | 16.90     | 6.79             | 1.09      | 1.15 | 0.96              | 22.97                     |
| 828.00          | 16.86     | 6.80             | 1.09      | 1.15 | 0.96              | 22.97                     |
| 830.00          | 16.83     | 6.82             | 1.09      | 1.16 | 0.96              | 23.01                     |
| 832.00          | 16.80     | 6.83             | 1.09      | 1.16 | 0.99              | 22.99                     |
| 835.00          | 16.75     | 6.88             | 1.09      | 1.16 | 0.99              | 23.05                     |
| 837.00          | 16.71     | 6.91             | 1.09      | 1.16 | 0.99              | 23.05                     |
| 839.00          | 16.68     | 6.93             | 1.10      | 1.16 | 0.97              | 23.01                     |
| 841.00          | 16.64     | 6.97             | 1.10      | 1.16 | 0.99              | 23.07                     |
| 843.00          | 16.60     | 7.01             | 1.10      | 1.16 | 1.00              | 23.09                     |
| 845.00          | 16.57     | 7.03             | 1.10      | 1.16 | 1.00              | 23.03                     |
| 847.00          | 16.53     | 7.03             | 1.10      | 1.16 | 0.99              | 23.14                     |
| 849.00          | 16.50     | 7.04             | 1.10      | 1.16 | 1.01              | 23.13                     |

