

Coaxial

Low Noise Amplifier

ZQL-1900LNW

50Ω

1700 to 2000 MHz

Features

- very low noise, 1.6 dB max.
- high IP3, +37 dBm typ.
- rugged, shielded case

Applications

- PCS
- UMTS
- mobile satellite service



CASE STYLE: CW686

| Connectors | Model | Price | Qty. |
|------------|-------------|----------|-------|
| SMA | ZQL-1900LNW | \$249.00 | (1-9) |

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 | | Min. | Flatness Max. | Output (1 dB Compr.) Typ. | Input (no damage) | | In | Out | Volt (V) Nom. | Current (mA) Max. |
| ZQL-1900LNW | 1700 | 2000 | 1.6 | 14 | ±1.8 | +18.5 | +10 | +37 | 1.15 | 1.25 | 15 | 160 |

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

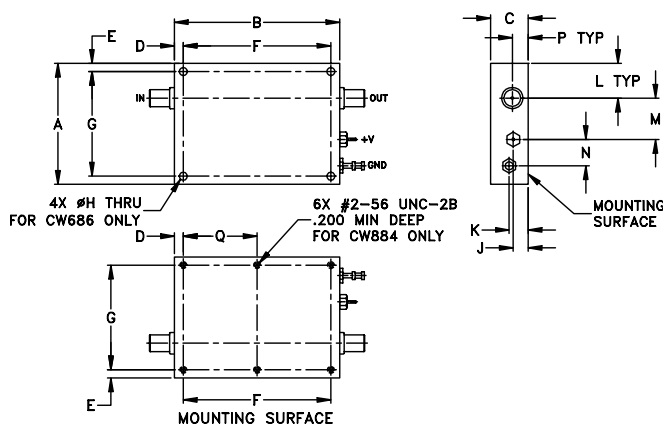
Maximum Ratings

Operating Temperature -40°C to 70°C

Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

Outline Drawing



Outline Dimensions (inches/mm)

| A | B | C | D | E | F | G | |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.77 | 2.42 | .55 | .13 | .12 | 2.165 | 1.535 | |
| 44.96 | 61.47 | 13.97 | 3.30 | 3.05 | 55.0 | 39.0 | |
| H | J | K | L | M | N | P | wt |
| .126 | .22 | .28 | .51 | .61 | .39 | 0.22 | grams |
| 3.20 | 5.59 | 7.11 | 12.95 | 15.49 | 9.91 | 5.59 | 71.0 |

INTERNET <http://www.minicircuits.com>

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M98086
ZQL-1900LNW
060310
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Typical Performance Data/Curves

ZQL-1900LNW

| FREQUENCY (MHz) | GAIN (dB) | DIRECTIVITY (dB) | VSWR (:1) | | NOISE FIGURE (dB) | POUT at 1 dB COMPR. (dBm) |
|--------------------|--------------|---------------------|--------------|------|-------------------------|---------------------------------|
| | 15V | 15V | IN | OUT | | |
| 1700.00 | 17.42 | 9.30 | 1.16 | 1.15 | 0.76 | 21.49 |
| 1800.00 | 17.01 | 9.50 | 1.03 | 1.17 | 0.69 | 21.28 |
| 1850.00 | 16.74 | 9.80 | 1.06 | 1.23 | 0.79 | 21.41 |
| 1865.00 | 16.63 | 9.80 | 1.08 | 1.26 | 0.78 | 21.73 |
| 1874.00 | 16.56 | 9.90 | 1.09 | 1.27 | 0.78 | 21.43 |
| 1886.00 | 16.44 | 10.00 | 1.10 | 1.28 | 0.79 | 21.44 |
| 1901.00 | 16.34 | 10.40 | 1.12 | 1.30 | 0.83 | 21.74 |
| 1910.00 | 16.26 | 10.30 | 1.13 | 1.31 | 0.85 | 21.41 |
| 1940.00 | 16.08 | 10.50 | 1.16 | 1.34 | 0.79 | 21.48 |
| 2000.00 | 15.47 | 11.40 | 1.16 | 1.35 | 0.86 | 21.46 |

