

Low Noise Amplifier

ZHL-1724MLN

50Ω

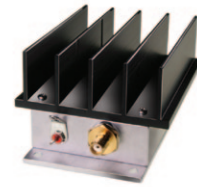
1700 to 2400 MHz

Features

- very low noise figure, 1.5 dB max.
- wideband, 1700 to 2400 MHz
- good IP3, +32 dBm typ.

Applications

- PCS/DCS
- UMTS
- Communication systems



Case Style: S32

| Connectors | Model | Price | Qty. |
|------------|-------------|--------------|-------|
| SMA | ZHL-1724MLN | \$295.00 ea. | (1-9) |

Electrical Specifications

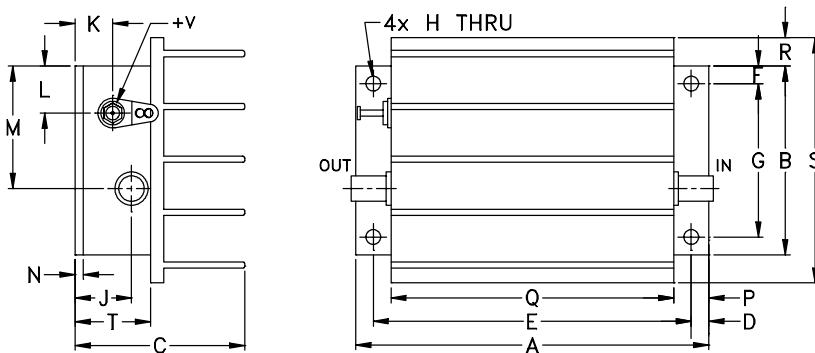
| Parameter | Frequency (MHz) | Min. | Typ. | Max. | Units |
|------------------------------------|-----------------|------|------|------|-------|
| Frequency Range | | 1700 | | 2400 | MHz |
| Noise Figure | 1700-2400 | — | — | 1.5 | dB |
| Gain | 1700-2400 | 28 | — | — | dB |
| Gain Flatness | 1700-2400 | — | — | ±1.0 | dB |
| Output Power at 1dB compression | 1700-2400 | — | +20 | — | dBm |
| Output third order intercept point | 1700-2400 | — | +32 | — | dBm |
| Input VSWR | 1700-2400 | — | — | 2.5 | :1 |
| Output VSWR | 1700-2400 | — | — | 2.5 | :1 |
| DC Supply Voltage | | — | 15 | — | V |
| Supply Current | | — | — | 300 | mA |

Noise Figure specified at room temperature, increases to 2.3 dB max. at +65°C

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

Outline Drawing



Maximum Ratings

| Parameter | Ratings |
|----------------------------|----------------|
| Operating Temperature | -20°C to 65°C |
| Storage Temperature | -55°C to 100°C |
| DC Voltage | 17V |
| Input RF Power (no damage) | 0 dBm |

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

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 |



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

IFIRF 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.

| FREQUENCY (MHz) | GAIN (dB) | | | DIRECTIVITY (dB) | | | VSWR (:1) | | NOISE FIGURE (dB) | P _{OUT} at 1 dB COMPR. (dBm) |
|-----------------|-----------|-------|-------|------------------|-------|-------|-----------|------|-------------------|---------------------------------------|
| | 12V | 15V | 16V | 12V | 15V | 16V | IN | OUT | | |
| 1700.00 | 29.92 | 30.34 | 30.33 | 34.40 | 32.60 | 32.90 | 2.02 | 1.54 | 1.09 | 22.79 |
| 1777.80 | 30.07 | 30.53 | 30.51 | 31.30 | 33.50 | 35.00 | 1.69 | 1.39 | 1.13 | 22.90 |
| 1855.50 | 29.96 | 30.44 | 30.43 | 30.80 | 31.40 | 34.60 | 1.48 | 1.24 | 1.12 | 23.05 |
| 1933.30 | 29.99 | 30.39 | 30.35 | 31.80 | 35.80 | 32.90 | 1.31 | 1.11 | 1.09 | 22.96 |
| 2011.10 | 30.09 | 30.34 | 30.24 | 30.30 | 31.90 | 29.30 | 1.18 | 1.04 | 1.07 | 23.04 |
| 2088.90 | 30.11 | 30.30 | 30.18 | 32.00 | 35.20 | 35.40 | 1.07 | 1.16 | 1.08 | 22.66 |
| 2166.70 | 30.08 | 30.30 | 30.19 | 30.10 | 29.30 | 29.50 | 1.10 | 1.31 | 1.10 | 22.71 |
| 2244.40 | 30.10 | 30.20 | 30.07 | 27.00 | 27.90 | 29.40 | 1.22 | 1.48 | 1.12 | 22.57 |
| 2322.20 | 30.01 | 29.91 | 29.72 | 25.10 | 28.30 | 27.20 | 1.40 | 1.68 | 1.13 | 21.96 |
| 2400.00 | 29.83 | 29.69 | 29.49 | 26.40 | 26.30 | 25.40 | 1.64 | 1.90 | 1.11 | 21.82 |

