

Low Noise Amplifier

ZEL-0812LN

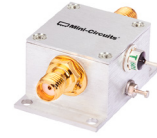
50Ω 800 to 1200 MHz

Features

- very low noise figure, 1.5 dB max.
- wideband, 800 to 1200 MHz
- rugged, shielded case

Applications

- UHF
- cellular
- PCS/GSM



Generic photo used for illustration purposes only

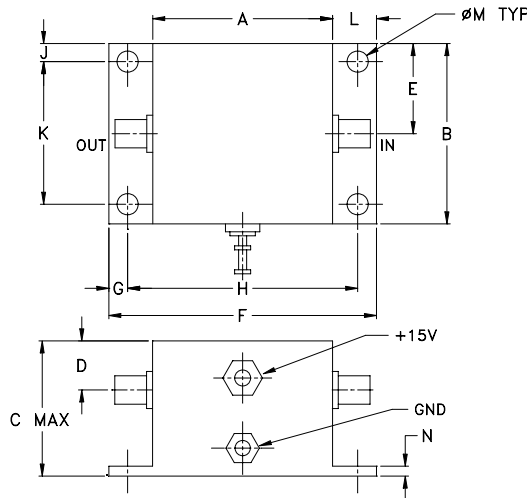
| | |
|--------------------|------------|
| Case Style: EEE132 | |
| Connectors | Model |
| SMA | ZEL-0812LN |

Electrical Specifications

| Parameter | Frequency (MHz) | Min. | Typ. | Max. | Units |
|------------------------------------|-----------------|------|------|------|-------|
| Frequency Range | | 800 | | 1200 | MHz |
| Noise Figure | 800-1200 | — | — | 1.5 | dB |
| Gain | 800-1200 | 20 | — | — | dB |
| Gain Flatness | 800-1200 | — | — | ±1.0 | dB |
| Output Power at 1dB compression | 800-1200 | — | +8 | — | dBm |
| Output third order intercept point | 800-1200 | — | +18 | — | dBm |
| Input VSWR | 800-1200 | — | — | 2.5 | :1 |
| Output VSWR | 800-1200 | — | — | 2.5 | :1 |
| DC Supply Voltage | | — | 15 | — | V |
| Supply Current | | — | — | 70 | mA |

Noise Figure specified at room temperature, increases to 2 dB typical at +85°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 | -54°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| DC Voltage | 17V |
| Input RF Power (no damage) | +13 dBm |

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

Outline Dimensions (inch/mm)

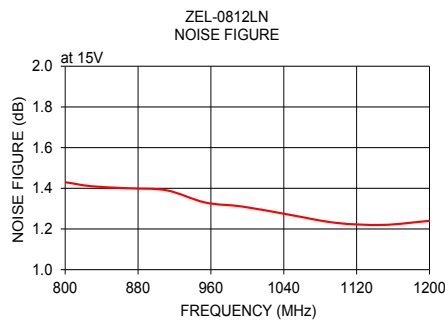
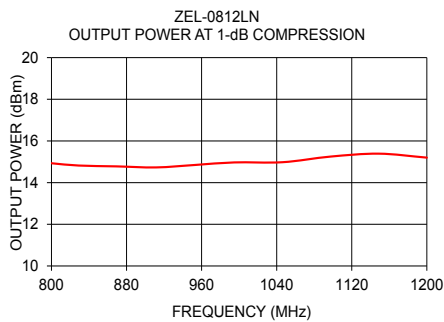
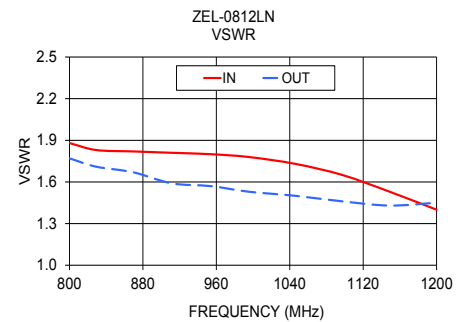
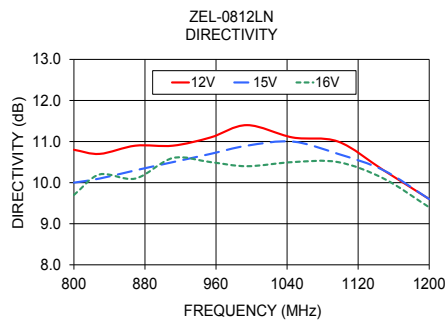
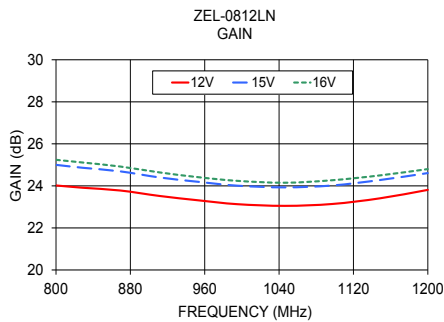
| A | B | C | D | E | F | G | H | J | K | L | M | N | wt |
|-------|-------|-------|------|-------|-------|------|-------|------|-------|------|------|------|-------|
| .90 | .90 | .675 | .245 | .45 | 1.34 | .09 | 1.152 | .09 | .712 | .22 | .106 | .05 | grams |
| 22.86 | 22.86 | 17.15 | 6.22 | 11.43 | 34.04 | 2.29 | 29.26 | 2.29 | 18.08 | 5.59 | 2.69 | 1.27 | 50.0 |

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.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty 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) | POUT at 1 dB COMPR. (dBm) |
|-----------------|-----------|-------|-------|------------------|-------|-------|-----------|------|-------------------|---------------------------|
| | 12V | 15V | 16V | 12V | 15V | 16V | IN | OUT | | |
| 800.00 | 24.02 | 25.00 | 25.24 | 10.80 | 10.00 | 9.70 | 1.88 | 1.77 | 1.43 | 14.93 |
| 829.00 | 23.91 | 24.86 | 25.11 | 10.70 | 10.10 | 10.20 | 1.83 | 1.71 | 1.41 | 14.82 |
| 869.20 | 23.78 | 24.69 | 24.92 | 10.90 | 10.30 | 10.10 | 1.82 | 1.67 | 1.40 | 14.78 |
| 911.50 | 23.52 | 24.40 | 24.64 | 10.90 | 10.50 | 10.60 | 1.81 | 1.59 | 1.39 | 14.73 |
| 953.80 | 23.31 | 24.19 | 24.41 | 11.10 | 10.70 | 10.50 | 1.80 | 1.57 | 1.33 | 14.85 |
| 994.90 | 23.13 | 24.01 | 24.24 | 11.40 | 10.90 | 10.40 | 1.78 | 1.53 | 1.31 | 14.97 |
| 1046.20 | 23.05 | 23.93 | 24.15 | 11.10 | 11.00 | 10.50 | 1.73 | 1.50 | 1.27 | 14.98 |
| 1097.40 | 23.14 | 24.02 | 24.27 | 11.00 | 10.70 | 10.50 | 1.65 | 1.46 | 1.23 | 15.25 |
| 1148.70 | 23.41 | 24.28 | 24.50 | 10.30 | 10.30 | 10.10 | 1.53 | 1.43 | 1.22 | 15.39 |
| 1200.00 | 23.81 | 24.61 | 24.80 | 9.60 | 9.60 | 9.40 | 1.40 | 1.45 | 1.24 | 15.20 |



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