

High IP3

Low Noise Amplifier

ZRL-700+

50Ω 250 to 700 MHz

Features

- high IP3, +46 dBm typ.
- low noise figure, 2.0 dB typ.
- broadband flat gain response
- internal voltage regulated
- over-voltage and transient protected

Applications

- high dynamic range applications
- mobile radio service
- NMT 450 cellular service
- aeronautical communications
- UHF television



| Connectors | Model | Price | Qty. |
|------------|----------|--------------|-------|
| SMA | ZRL-700+ | \$119.95 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.

Electrical Specifications at T_{AMB}=25°C

| MODEL NO. | FREQUENCY (MHz) | | GAIN (dB) | | | | NOISE FIGURE (dB) | | MAXIMUM POWER OUTPUT (dBm) | | | INTERCEPT POINT (dBm) Note 1 | VSWR (:1) Typ. | | ACTIVE DIRECTIVITY (dB) (Isolation-Gain) Typ. | DC VOLTAGE @ Pin V+ (V) Nom. Note 2 | DC OPERATING CURRENT @ Pin V+ (mA) | |
|-----------|-----------------|----------------|-----------|------|------|------|-------------------|------|---|------|------|---------------------------------|-------------------|------|---|---|------------------------------------|------|
| | f _L | f _U | Typ. | Min. | Typ. | Max. | Typ. | Max. | Saturated at (1 dB Compr.) 3dB Compr. | | In | | Out | Typ. | | | Typ. | Max. |
| ZRL-700+ | 250 | 700 | 29 | 27 | ±0.5 | ±1.0 | 2.0 | 3.5 | 24.8 | 23.5 | 25.2 | +46 | 1.20 | 1.10 | 15 | 12 | 514 | 575 |
| | 300 | 500 | 29 | 27.5 | ±0.3 | ±0.7 | 2.0 | 3.5 | 24.8 | 23.5 | 25.3 | +46 | 1.10 | 1.05 | 14.5 | 12 | 514 | 575 |

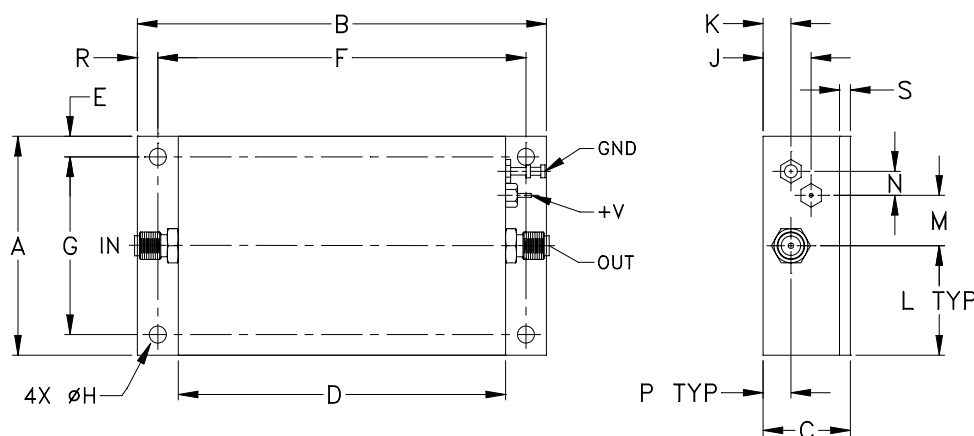
1. 1MHz tone spacing
2. Unit is internally voltage regulated for 6.5 to 17VDC input voltage range.

Maximum Ratings

| | |
|-------------------------|-----------------------|
| Operating Temperature | -40°C to 80°C case |
| | -40°C to 60°C ambient |
| Storage Temperature | -55°C to 100°C |
| DC Voltage | +17V Max. |
| Input Power (no damage) | +10dBm |

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 | wt |
|-------|-------|-------|-------|------|-------|-------|------|-------|------|-------|-------|------|------|----|------|------|-------|
| 2.00 | 3.75 | 0.80 | 3.00 | 0.19 | 3.374 | 1.624 | 0.16 | 0.44 | 0.26 | 1.00 | 0.51 | 0.22 | 0.26 | -- | 0.19 | 0.10 | grams |
| 50.80 | 95.25 | 20.32 | 76.20 | 4.83 | 85.70 | 41.25 | 3.96 | 11.18 | 6.60 | 25.40 | 12.95 | 5.59 | 6.60 | -- | 4.83 | 2.54 | 135 |

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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-Circuits' 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.

