

High IP3

# Low Noise Amplifier

## ZRL-2150+

50Ω 950 to 2150 MHz



CASE STYLE: FJ893

Connectors	Model	Price	Qty.
SMA	ZRL-2150+	\$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.

### Features

- high IP3, +33 dBm typ.
- low noise figure, 1.5 dB typ.
- broadband flat gain response
- excellent return loss, 20 dB typ.
- internal voltage regulated
- over-voltage and transient protected

### Applications

- PCS, UMTS
- mobile satellite service
- baseband amp, fiber optic driver
- aeronautical and defense communications

### Electrical Specifications at T<sub>AMB</sub>=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 <sub>L</sub>	f <sub>H</sub>	Typ.	Min.	Typ.	Max.	Typ.	Max.	Saturated at (1 dB Compr.) 3dB Compr.		In		Out	Typ.			Typ.	Max.
ZRL-2150+	950	2150	25	22.5	±1.1	±1.8	1.5	2.2	22	17.5	22.5	+33	1.3	1.2	26	12	255	300
	1500	2000	25	23	±0.9	±1.5	1.3	2.0	24	22	25.2	+34	1.3	1.2	21	12	255	300

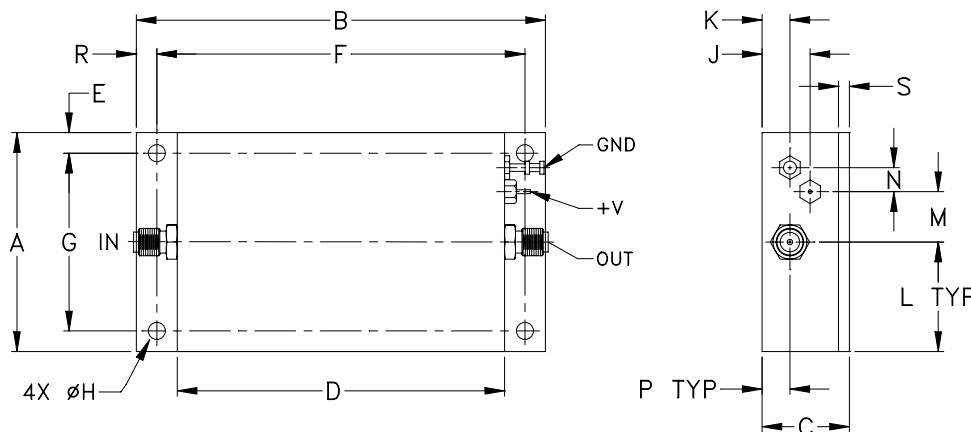
1. 1MHz tone spacing
2. Unit is internally voltage regulated for 6.5 to 17VDC input voltage range.

### 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)	+10 dBm

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

**Mini-Circuits®**  
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-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).

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