

High IP3

Low Noise Amplifier

ZRL-2150+

50Ω

950 to 2150 MHz

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



Generic photo used for illustration purposes only

Case Style: FJ893

Connectors	Model
SMA	ZRL-2150+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		950		2150	MHz
Noise Figure	950 - 2150	—	1.5	2.2	dB
	1500 - 2000	—	1.3	2.0	
Gain	950 - 2150	22.5	25	—	dB
	1500 - 2000	23	25	—	
Gain Flatness	950 - 2150	—	±1.1	±1.8	dB
	1500 - 2000	—	±0.9	±1.5	
Output Power at 1dB compression	950 - 2150	16.3	22	—	dBm
	1500 - 2000	21.3	24	—	
Output Power at 3dB compression	950 - 2150	—	22.5	—	dBm
	1500 - 2000	—	25.2	—	
Output third order intercept point ¹	950 - 2150	—	+33	—	dBm
	1500 - 2000	—	+34	—	
Input VSWR	950 - 2150	—	1.3	—	:1
	1500 - 2000	—	1.3	—	
Output VSWR	950 - 2150	—	1.2	—	:1
	1500 - 2000	—	1.2	—	
Active Directivity	950 - 2150	—	26	—	dB
	1500 - 2000	—	21	—	
DC Supply Voltage ²		—	12	—	V
Supply Current		—	255	300	mA

1. 1 MHz tone spacing.

2. Unit is internally voltage regulated for 6.5 to 17VDC input voltage range.

Maximum Ratings

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

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

Notes

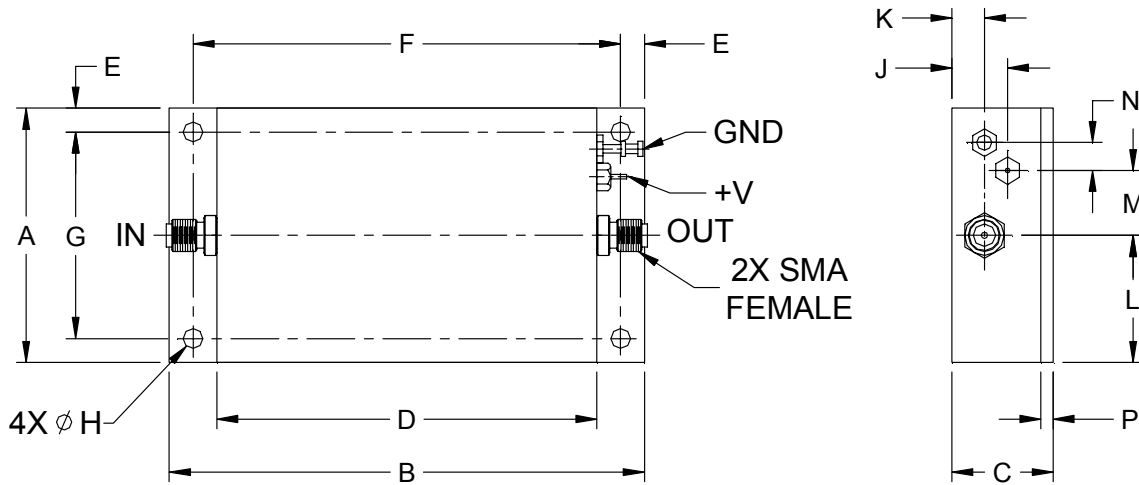
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document 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



Outline Drawing



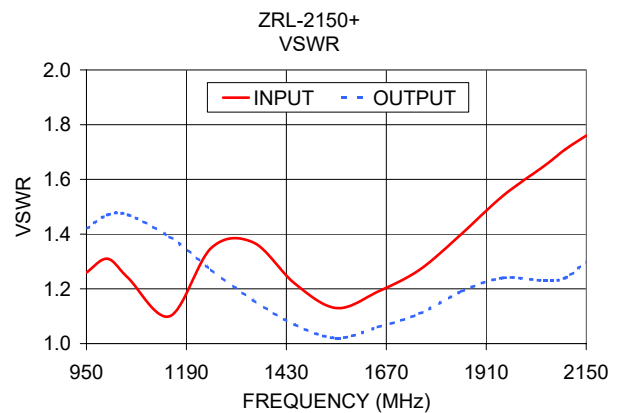
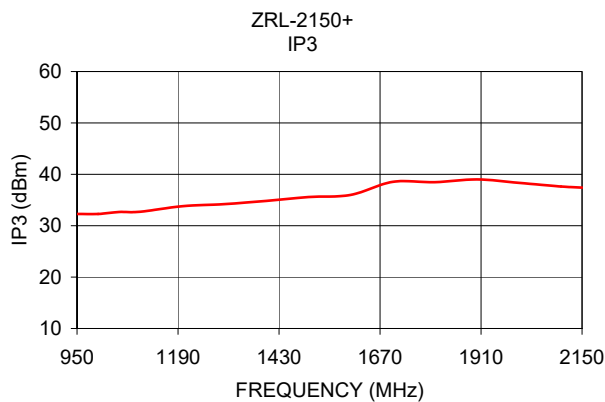
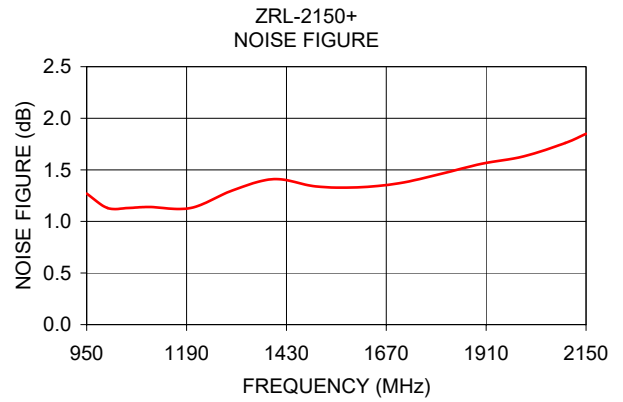
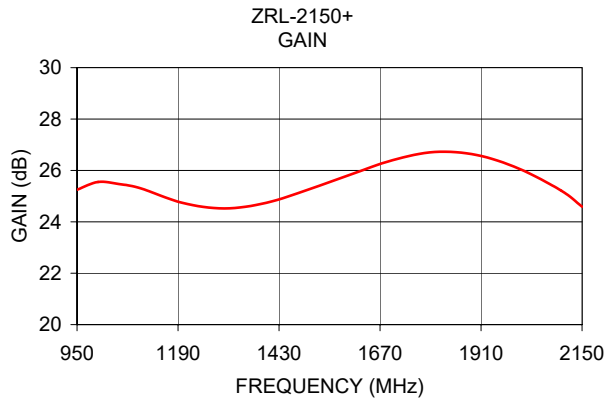
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
2.00	3.75	0.80	3.00	0.19	3.374	1.624	0.156	0.44	0.26	1.00	0.51	0.22	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	2.54	135

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