

Low Noise Amplifier

ZRL-2300+

50Ω

1400 to 2300 MHz

Features

- High IP3, +42 dBm typ.
- Low Noise figure, 2.5 dB typ.
- Broadband flat gain response
- Excellent return loss, 20 dB typ.
- Internal voltage regulated
- Over-voltage and transient protected

Applications

- High dynamic range
- PCS, UMTS, GSM, cellular, wireless data
- Defense and satellite communications
- High linearity driver amplifier



Case Style: FJ893

Connectors	Model	Price	Qty.
SMA	ZRL-2300+	\$119.95 ea.	(1-9)

+RoHS Compliant

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

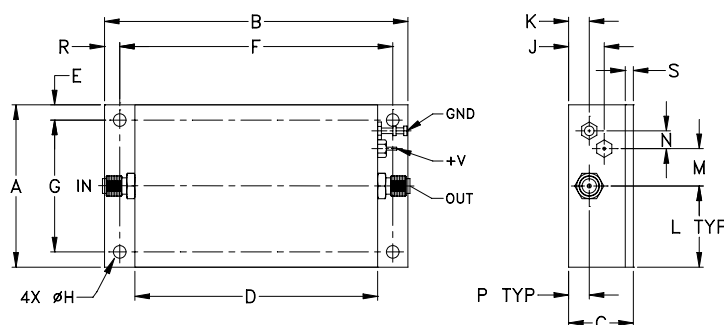
Electrical Specifications at 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1400		2300	MHz
Noise Figure	1400 - 2300 1650 - 2150	— —	2.5 2.3	3.5 3.5	dB
Gain	1400 - 2300 1650 - 2150	21 22	24 25	—	dB
Gain Flatness	1400 - 2300 1650 - 2150	— —	±0.5 ±0.3	±1.0 ±0.8	dB
Output Power at 1dB compression	1400 - 2300 1650 - 2150	23 23	24.6 24.6	—	dBm
Output Power at 3dB compression	1400 - 2300 1650 - 2150	— —	26 26	—	dBm
Output third order intercept point ¹	1400 - 2300 1650 - 2150	— —	+42 +42	—	dBm
Input VSWR	1400 - 2300 1650 - 2150	— —	1.2 1.2	—	:1
Output VSWR	1400 - 2300 1650 - 2150	— —	1.16 1.16	—	:1
Active Directivity	1400 - 2300 1650 - 2150	— —	19 17	—	dB
DC Supply Voltage ²		—	12	—	V
Supply Current		—	450	575	mA

1. 1 MHz tone spacing.

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

Outline Drawing



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.

Outline Dimensions (inch mm)

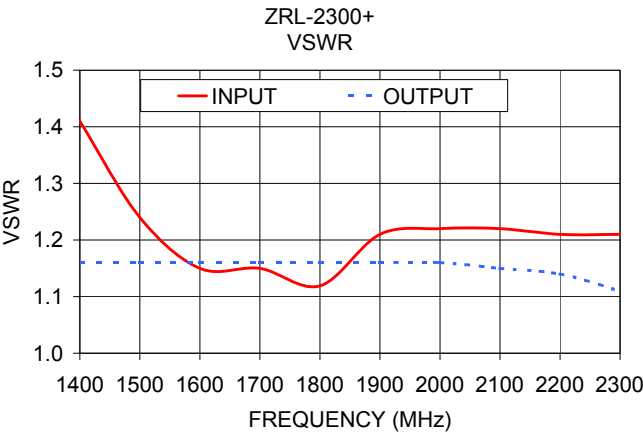
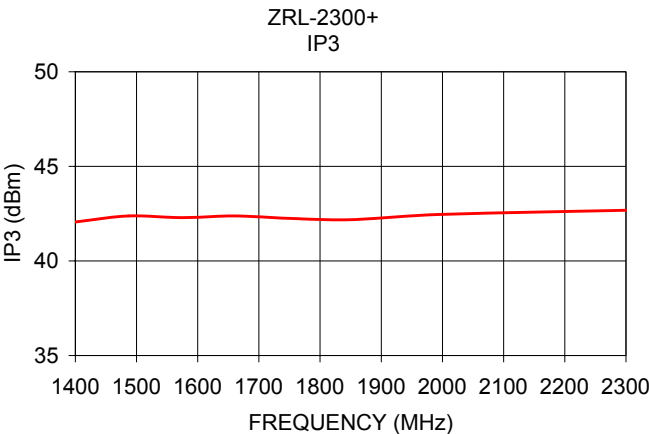
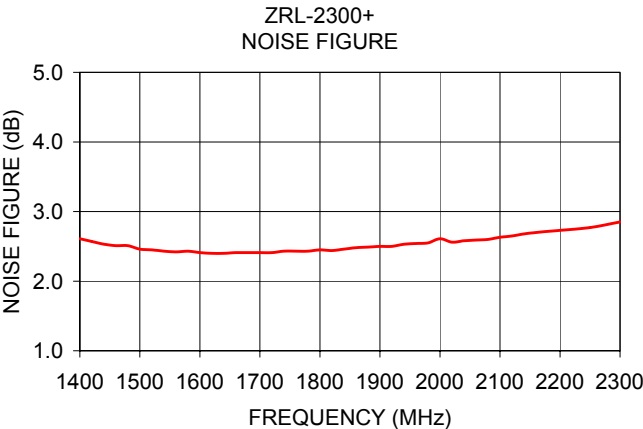
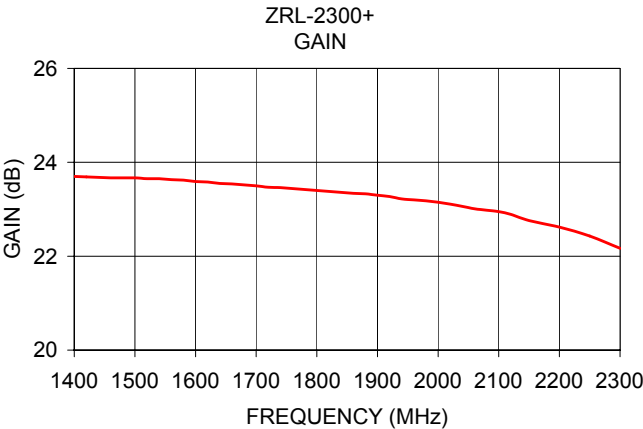
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	wt
2.00	3.75	0.80	3.00	0.19	3.374	1.624	0.16	0.44	0.26	1.00	0.51	0.22	0.26	--	0.19	0.10	grams
50.80	95.25	20.32	76.20	4.83	85.70	41.25	3.96	11.18	6.60	25.40	12.95	5.59	6.60	--	4.83	2.54	135

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
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