

High IP3 Low Noise Amplifier

ZRL-2400LN+ ZRL-2400LN

50Ω 1000 to 2400 MHz

Features

- High IP3, +45 dBm typ.
- Low Noise figure, 1.2 dB typ.
- Broadband flat gain response
- Internal voltage regulated
- Over-voltage and transient protected

Applications

- PCS, UMTS, GSM, cellular, wireless data
- Defense communications
- Satellite communications



Case Style: FJ893

Connectors	Model	Price	Qty.
SMA	ZRL-2400LN(+)	\$139.95 ea.	(1-9)

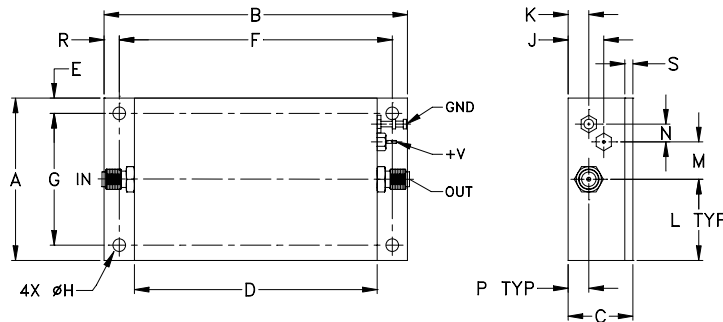
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1000		2400	MHz
Noise Figure ³	1000 - 1400	—	1.2	2.0	dB
	1400 - 1900	—	1.0	1.4	
	1900 - 2400	—	1.2	1.4	
Gain	1000 - 1400	28	31	—	dB
	1400 - 1900	24	27	—	
	1900 - 2400	23	25	—	
Gain Flatness	1000 - 1400	—	±1.6	±2.0	dB
	1400 - 1900	—	±1.8	±2.2	
	1900 - 2400	—	±1.0	±2.0	
Output Power at 1dB compression	1000 - 1400	21	23	—	dBm
	1400 - 1900	23	24	—	
	1900 - 2400	23	24	—	
Output Power at 3dB compression	1000 - 1400	—	25.3	—	dBm
	1400 - 1900	—	26.0	—	
	1900 - 2400	—	26.0	—	
Output third order intercept point ¹	1000 - 1400	—	+45	—	dBm
	1400 - 1900	—	+44	—	
	1900 - 2400	—	+45	—	
Input VSWR	1000 - 1400	—	1.5	—	:1
	1400 - 1900	—	1.15	—	
	1900 - 2400	—	1.2	—	
Output VSWR	1000 - 1400	—	1.35	—	:1
	1400 - 1900	—	1.25	—	
	1900 - 2400	—	1.3	—	
Active Directivity	1000 - 1400	—	13	—	dB
	1400 - 1900	—	16	—	
	1900 - 2400	—	16	—	
DC Supply Voltage ²		—	12	—	V
Supply Current		—	424	500	mA

1. 1 MHz tone spacing.
2. Unit is internally voltage regulated for 6.5 to 17VDC input voltage range.
3. 2.2 dB max at frequency 1000-1050 MHz.

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

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.

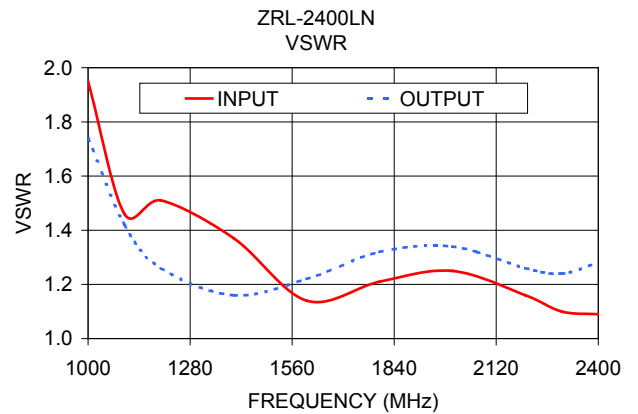
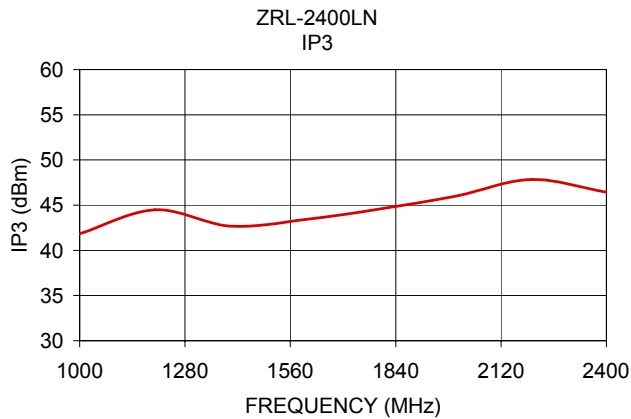
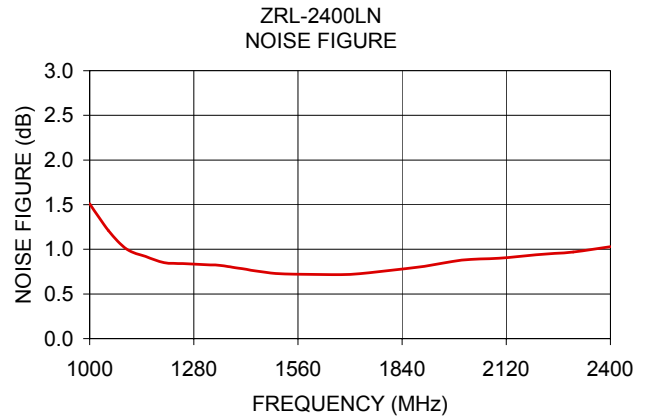
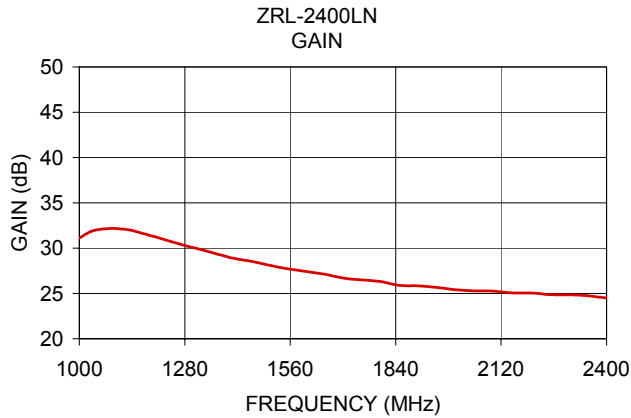
Notes

- 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.
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Typical Performance Data/Curves



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