

High IP3

Low Noise Amplifier

ZRL-400+

50Ω

150 to 400 MHz

Features

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

Applications

- High dynamic range VHF/UHF
- Mobile radio
- VHF/UHF television or radio
- defense communications



Generic photo used for illustration purposes only

Case Style: FJ893

Connectors Model

SMA ZRL-400+

+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		150		400	MHz
Noise Figure	150 - 400	—	2.5	3.5	dB
	175 - 300	—	2.5	3.5	
Gain	150 - 400	27	31	—	dB
	175 - 300	28	31	—	
Gain Flatness	150 - 400	—	±0.5	±1.0	dB
	175 - 300	—	±0.3	±0.5	
Output Power at 1dB compression	150 - 400	23.5	25	—	dBm
	175 - 300	23.5	25	—	
Output third order intercept point ¹	150 - 400	—	+42	—	dBm
	175 - 300	—	+42	—	
Input VSWR	150 - 400	—	1.5	—	:1
	175 - 300	—	1.5	—	
Output VSWR	150 - 400	—	1.25	—	:1
	175 - 300	—	1.15	—	
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.

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

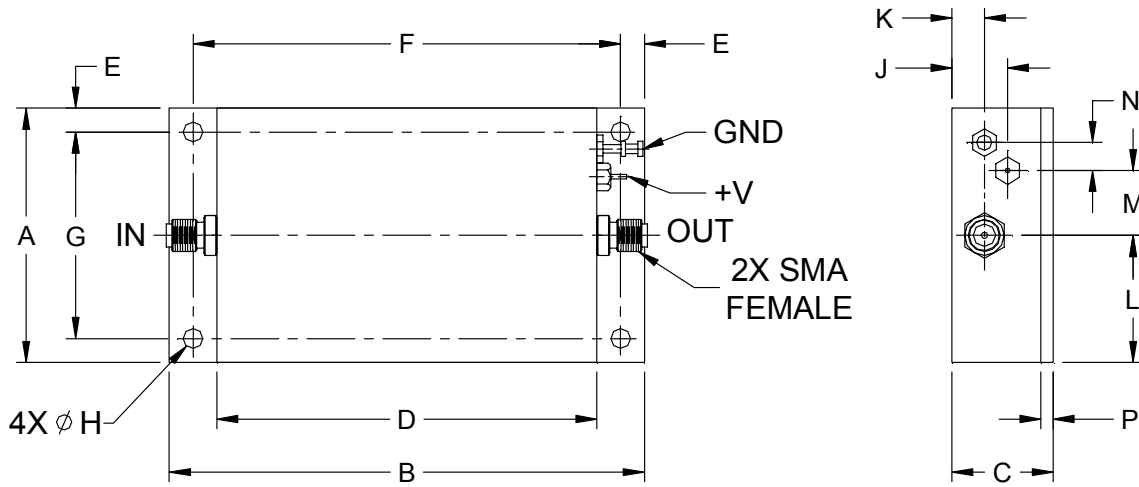
Permanent damage may occur if any of these limits are exceeded.

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



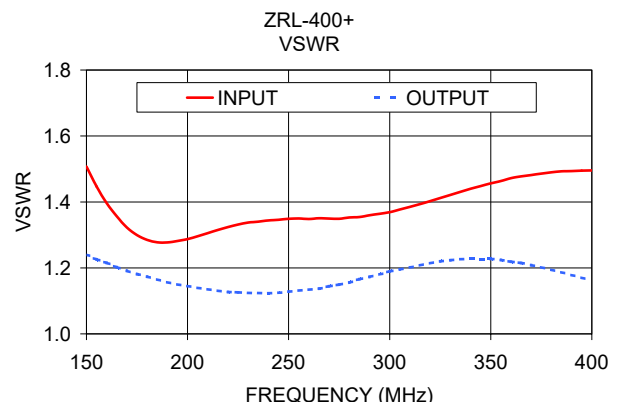
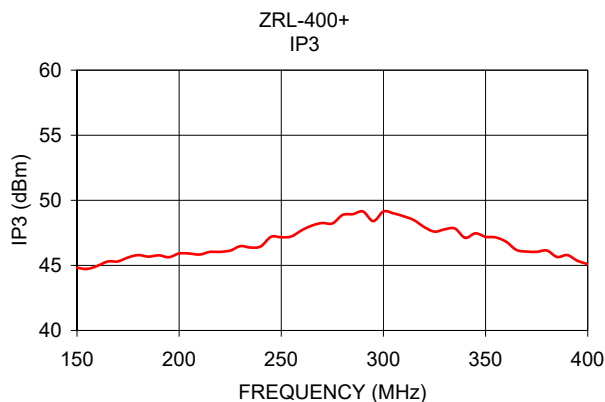
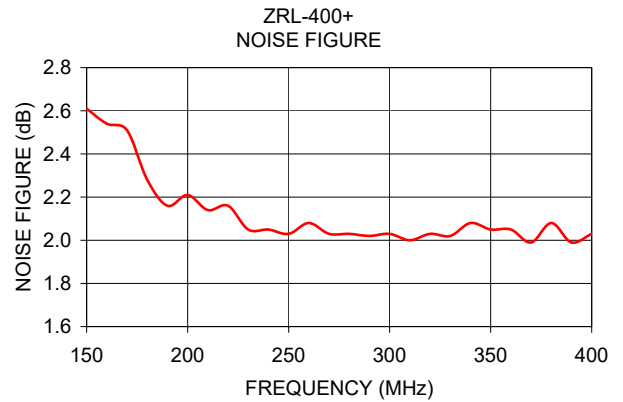
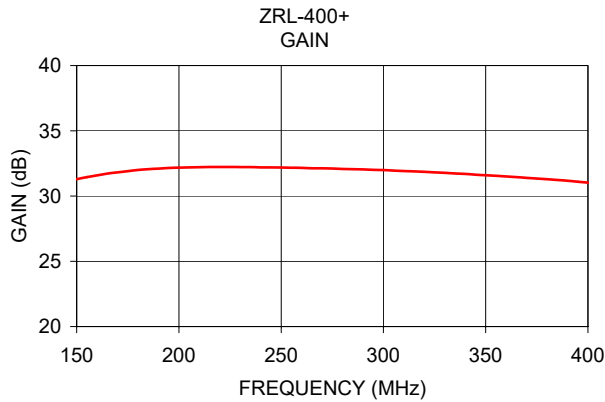
Outline Dimensions (inch/mm)

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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