

# Coaxial Low Noise Amplifier

## ZFL-1000LN+

50Ω 0.1 to 1000 MHz

### Features

- low noise figure, 2.9 dB typ.
- wideband, 0.1 to 1000 MHz
- protected by US Patent 6,943,629

### Applications

- VHF/UHF
- cellular
- small signal amplifier



Case Style: Y460

Connectors	Model	Price	Qty.
SMA	ZFL-1000LN+	\$89.95 ea.	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

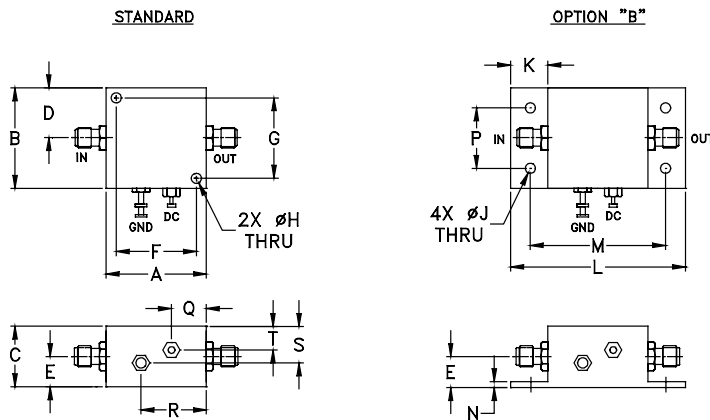
The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range		0.1		1000	MHz
Noise Figure	0.1-1000	—	2.9	—	dB
Gain	0.1-1000	20	—	—	dB
Gain Flatness	0.1-1000	—	—	±0.5	dB
Output Power at 1dB compression	0.1-1000	—	+3	—	dBm
Output third order intercept point	0.1-1000	—	+14	—	dBm
Input VSWR	0.1-1000	—	1.5	—	:1
Output VSWR	0.1-1000	—	2.0	—	:1
DC Supply Voltage		—	15	—	V
Supply Current		—	—	60	mA

Open load is not recommended, potentially can cause damage.  
With no load derate max input power by 20 dB

### Outline Drawing



### Maximum Ratings

Parameter	Ratings
Operating Temperature	-20°C to 71°C
Storage Temperature	-55°C to 100°C
DC Voltage	17V
Input RF Power (no damage)	+5 dBm

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

### Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt.
1.25	1.25	.75	.63	.36	1.000	1.000	.125	.125	.46	2.18	1.688	.06	.750	.50	.80	.45	.29	grams
31.75	31.75	19.05	16.00	9.14	25.40	25.40	3.18	3.18	11.68	55.37	42.88	1.52	19.05	12.70	20.32	11.43	7.37	38



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IFIRF MICROWAVE COMPONENTS

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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FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
0.10	19.66	23.31	23.96	29.30	27.50	27.90	1.28	1.19	—	4.76
0.70	19.90	23.56	24.24	28.80	27.10	26.90	1.11	1.13	—	4.95
7.90	19.89	23.55	24.21	28.60	27.10	27.20	1.11	1.13	—	5.02
95.70	19.91	23.50	24.14	28.50	27.20	26.70	1.11	1.14	2.98	4.91
384.70	19.69	23.21	23.81	25.90	24.80	24.10	1.07	1.26	3.07	6.08
487.20	20.16	23.42	23.97	25.00	23.50	22.80	1.08	1.30	3.09	6.60
615.40	20.48	23.49	24.02	22.80	21.30	21.30	1.09	1.36	3.08	7.14
743.60	20.81	23.65	24.11	21.30	19.80	19.30	1.05	1.45	3.05	7.47
871.80	20.79	23.50	23.96	19.50	18.20	17.40	1.03	1.57	3.07	7.43
1000.00	20.84	23.32	23.66	18.10	16.60	16.20	1.06	1.71	3.11	7.00

