

Coaxial Low Noise Amplifier

ZFL-500LN+ ZFL-500LN

50Ω 0.1 to 500 MHz

Features

- very low noise, 2.9 dB typ.
- good VSWR, 1.5 :1 typ.
- protected by US Patent, 6,943,629

Applications

- VHF/UHF
- small signal amplifier
- communications system



CASE STYLE: Y460

Connectors	Model	Price	Qty.
SMA	ZFL-500LN+	\$79.95	(1-9)
BNC	ZFL-500LN-BNC(+)	\$84.95	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

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

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

Low Noise Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		NOISE FIGURE (dB)	GAIN (dB)		MAXIMUM POWER (dBm)		INTERCEPT POINT (dBm)	VSWR (:1) Typ.		DC POWER	
	f_L	f_U		Typ.	Min.	Total Range	Output (1 dB Compr.)		Input (no damage)	IP3 Typ.	In	Out
ZFL-500LN(+)	0.1	500	2.9	24	±0.5	+5	+5	+14	1.5*	1.6	15	60

m = mid range [2 f_L to $f_U/2$]

*VSWR 1.6:1 max. from 0.1 to 0.2 MHz.

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

Maximum Ratings

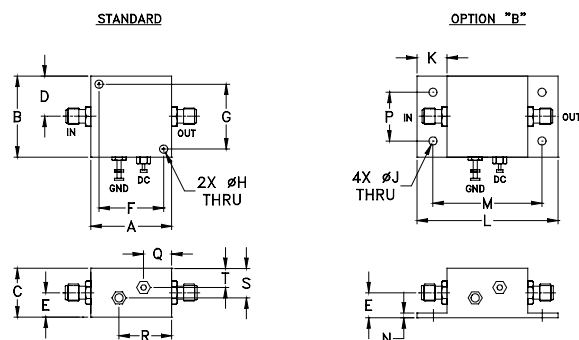
Operating Temperature -20°C to 71°C

Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

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

Outline Drawing



Outline Dimensions (inch/mm)

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

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IF/RF MICROWAVE COMPONENTS

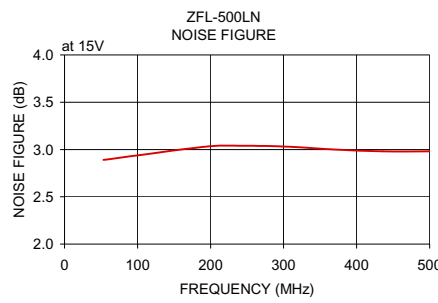
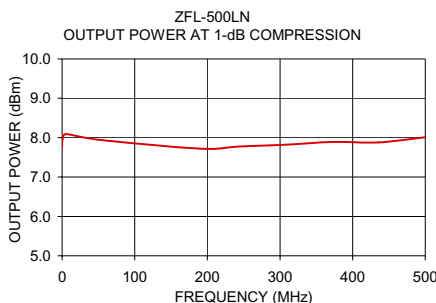
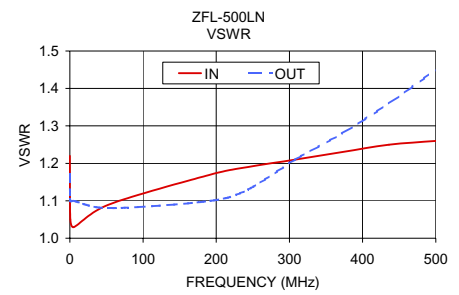
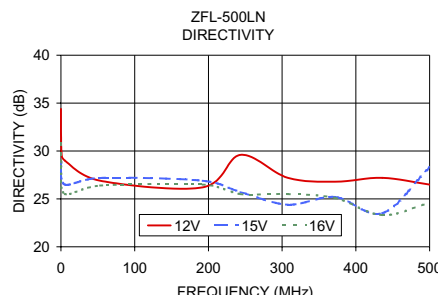
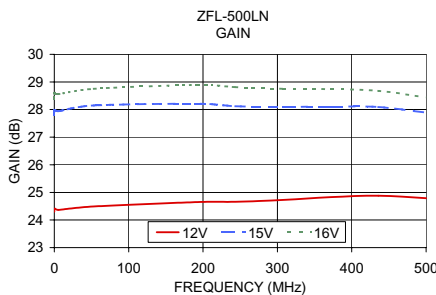
For detailed performance specs & shopping online see web site

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/MOLStore/terms.jsp.

Typical Performance Data/Curves

ZFL-500LN+ ZFL-500LN

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	24.30	27.80	28.40	34.40	27.80	30.80	1.22	1.17	—	7.74
0.60	24.41	27.98	28.60	30.00	28.80	28.40	1.05	1.10	—	7.97
5.40	24.37	27.94	28.56	29.00	26.50	25.50	1.03	1.10	—	8.09
53.30	24.49	28.15	28.75	26.90	27.20	26.40	1.09	1.08	2.89	7.94
192.40	24.65	28.21	28.89	26.20	26.90	26.50	1.17	1.10	3.03	7.72
243.60	24.66	28.12	28.81	29.60	25.70	25.50	1.19	1.13	3.04	7.78
307.70	24.73	28.10	28.75	27.20	24.40	25.50	1.21	1.21	3.03	7.82
371.80	24.83	28.11	28.75	26.80	25.20	25.10	1.23	1.28	3.00	7.89
435.90	24.88	28.09	28.68	27.20	23.50	23.30	1.25	1.36	2.98	7.88
500.00	24.79	27.89	28.44	26.50	28.30	24.60	1.26	1.45	2.98	8.01



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