

Coaxial

Low Noise Amplifier

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



SMA version shown

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+)

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		Min.	Total Range	Output (1 dB Compr.)	Input (no damage)		In	Out	Volt (V) Nom.	Current (mA) Max.
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

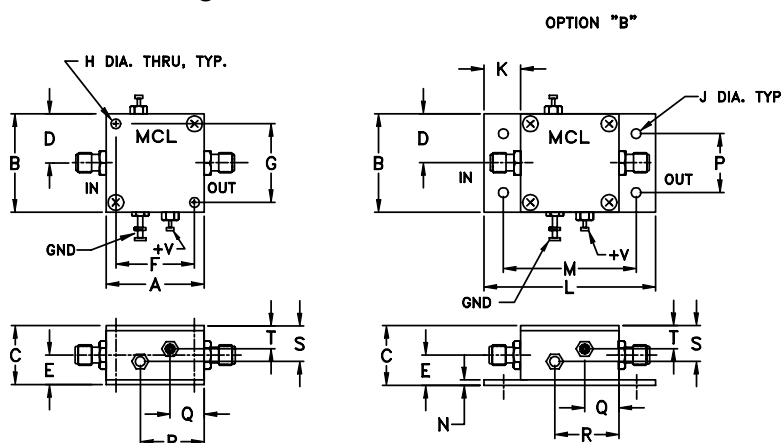
Maximum Ratings

Operating Temperature -54°C to 85°C

Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

Outline Drawing



Outline Dimensions (inch)

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

INTERNET <http://www.minicircuits.com>

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Mini-Circuits ISO 9001 & ISO 14001 Certified

 REV. OR
 M98086
 ZFL-500LN
 051228
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Typical Performance Data/Curves

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	28.74	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

