

# 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

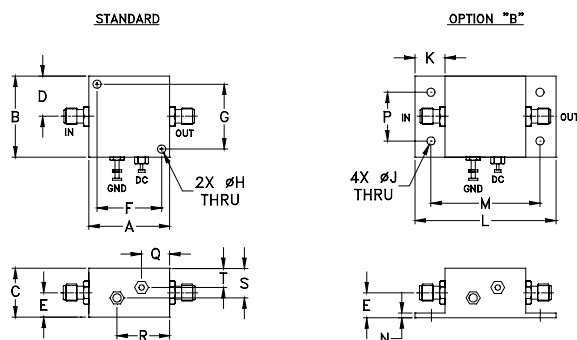
Operating Temperature -20°C to 71°C

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



For detailed performance specs & shopping online see web site

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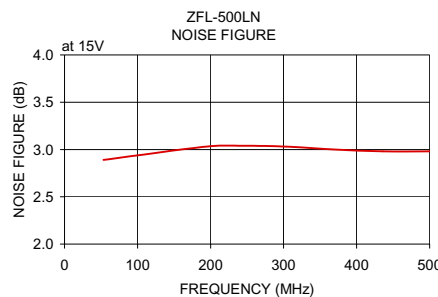
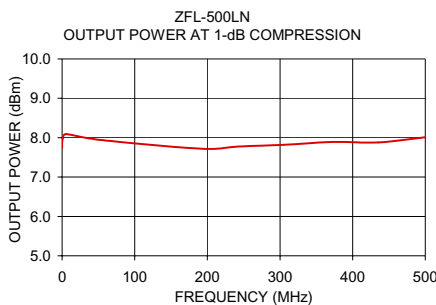
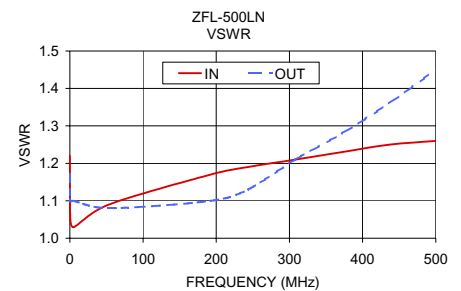
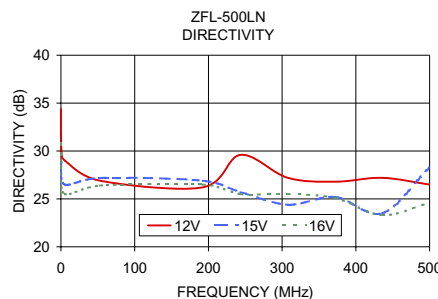
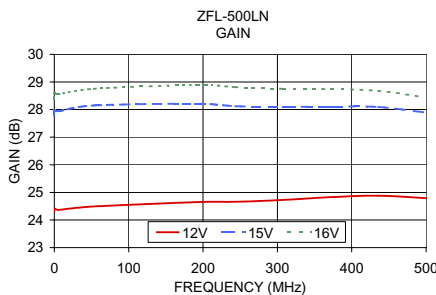
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# Typical Performance Data/Curves

# ZFL-500LN+ ZFL-500LN

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1dB 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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