

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

### Applications

- VHF/UHF
- small signal amplifier
- communications system



Generic photo used for illustration purposes only

CASE STYLE: Y460

Connectors	Model
SMA	ZFL-500LN+
BNC	ZFL-500LN-BNC+
<b>BRACKET (OPTION "B")</b>	

**+RoHS Compliant**

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 <sub>L</sub>	f <sub>U</sub>		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<sub>L</sub> to f<sub>U</sub>/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

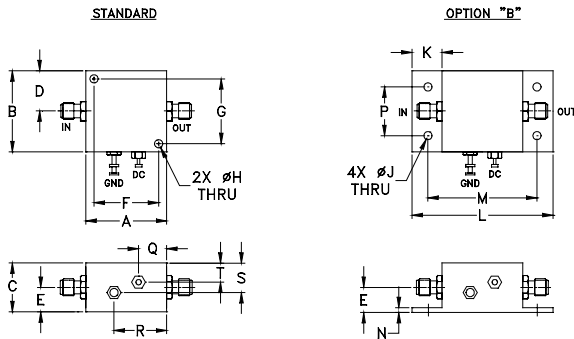
Operating Temperature -20°C to 71°C

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

### Notes

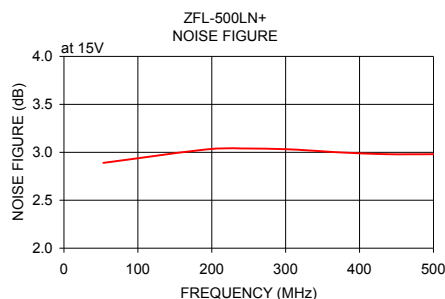
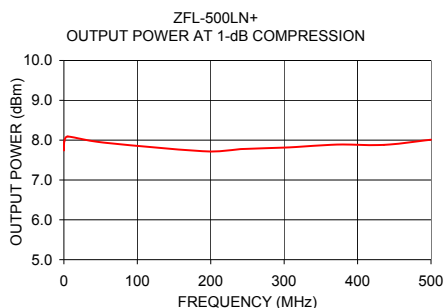
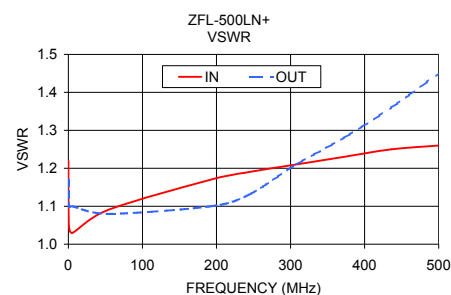
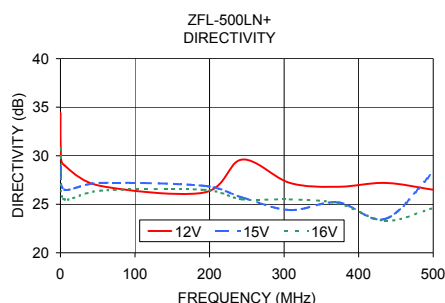
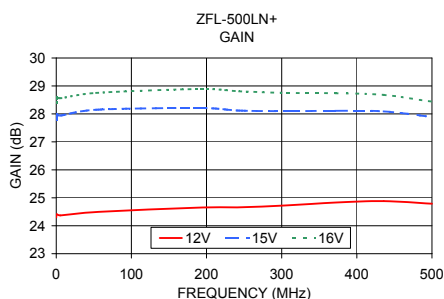
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ZFL-500LN+  
151005  
Page 1 of 2

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



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