

# Coaxial Low Noise Amplifier

## ZFL-500HLN+

50Ω 10 to 500 MHz

### Features

- low noise, 3.8 dB typ.
- high IP3, +30 dBm typ.

### Applications

- VHF/UHF
- small signal amplifier
- communications system



Generic photo used for illustration purposes only

CASE STYLE: Y460

Connectors Model  
**SMA** ZFL-500HLN+  
**BRACKET (OPTION "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	
	$f_L$	$f_U$		Flatness Max.	Total Range	Output (1 dB Compr.)	Input (no damage)		IP3 Typ.	In	Out	Volt (V) Nom.
ZFL-500HLN+	10	500	3.8	19	±0.4	+16	+15	+30	2.0	2.0	15	110

m = mid range [2 fL to fU/2]

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

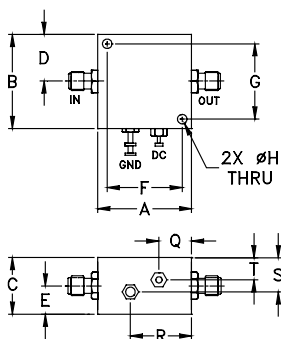
Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

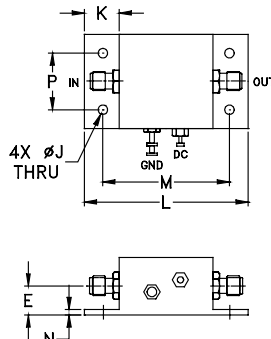
Permanent damage may occur if any of these limits are exceeded.

### Outline Drawing

STANDARD



OPTION "B"



### 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

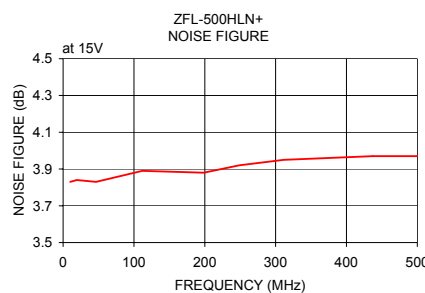
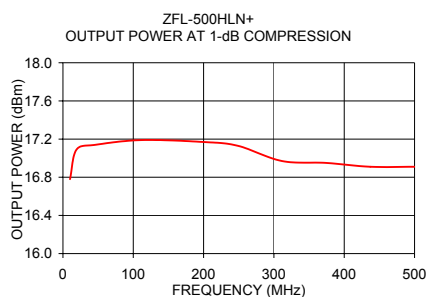
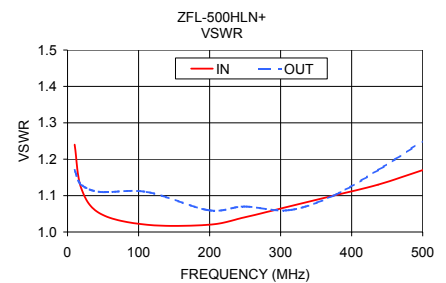
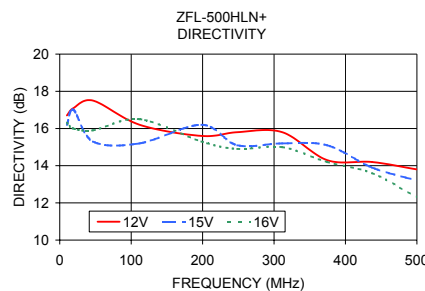
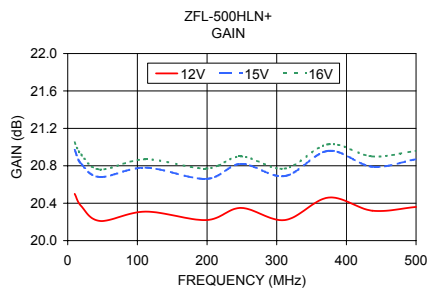
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 M151107  
 ZFL-500HLN+  
 151005  
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FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
10.00	20.50	20.97	21.05	16.70	16.20	16.30	1.24	1.17	3.83	16.78
19.30	20.37	20.82	20.92	17.10	17.00	16.00	1.12	1.13	3.84	17.09
46.50	20.21	20.68	20.76	17.50	15.30	15.90	1.05	1.11	3.83	17.14
111.80	20.31	20.78	20.87	16.20	15.20	16.50	1.02	1.11	3.89	17.19
198.50	20.22	20.66	20.77	15.60	16.20	15.30	1.02	1.06	3.88	17.17
248.70	20.35	20.82	20.90	15.80	15.10	14.90	1.04	1.07	3.92	17.13
311.50	20.22	20.69	20.77	15.80	15.20	15.00	1.07	1.06	3.95	16.97
374.40	20.46	20.96	21.03	14.30	15.10	14.20	1.10	1.10	3.96	16.95
437.20	20.32	20.79	20.90	14.20	13.90	13.60	1.13	1.17	3.97	16.91
500.00	20.36	20.87	20.96	13.80	13.20	12.30	1.17	1.25	3.97	16.91



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