Coaxial

Low Noise Amplifier

ZFL-500HLN+

50Ω 10 to 500 MHz

Features

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

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

Applications

- VHF/UHF
- small signal amplifier
- communications system

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	
					Flatness Max.							
	f_L	f_U	Typ.	Min.	Total Range	Output (1 dB Compr.)	Input (no damage)	IP3 Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
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]

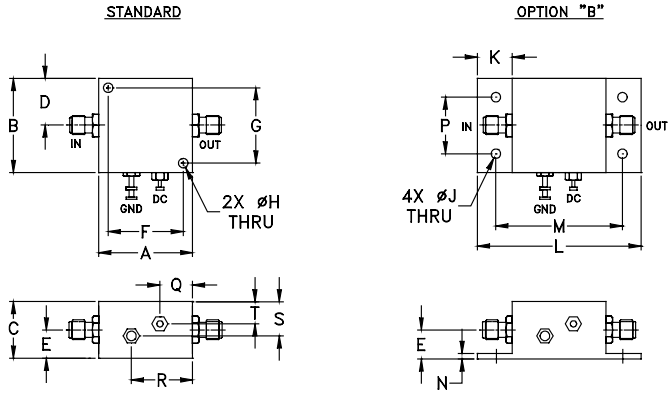
Open load is not recommended, potentially can cause damage.
With no load derate max input power by 20 dB

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



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

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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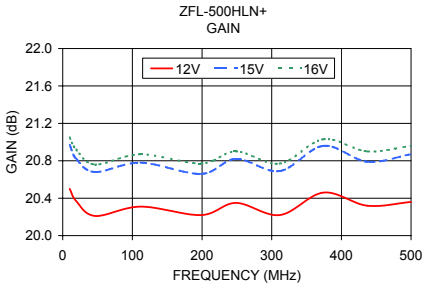
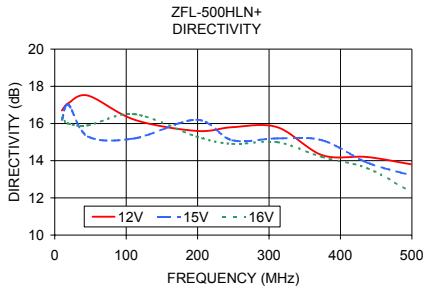
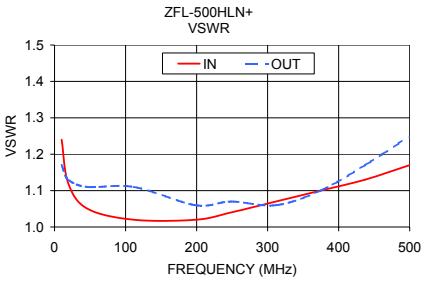
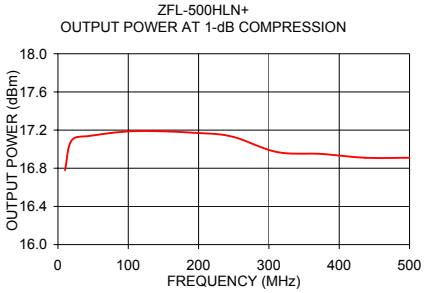
Typical Performance Data/Curves ZFL-500HLN+

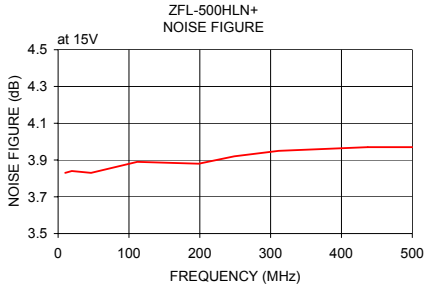
FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT	15V	15V
10.00	20.50	20.97	21.05	16.70	16.20	16.30	1.24	1.17	3.83	16.78
19.30	20.37	20.82	20.92	17.10	17.00	16.00	1.12	1.13	3.84	17.09
46.50	20.21	20.68	20.76	17.50	15.30	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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