

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



CASE STYLE: Y460

Connectors	Model	Price	Qty.
SMA	ZFL-500HLN+	\$99.95	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify 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

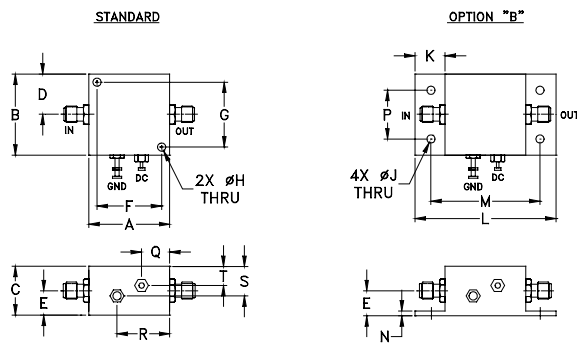
Operating Temperature -20°C to 71°C

Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

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

Outline Drawing



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

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

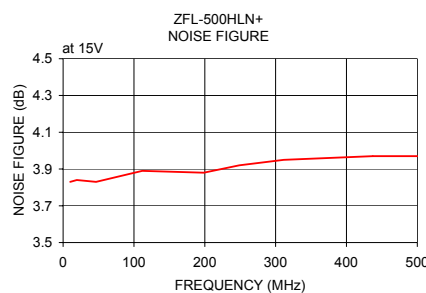
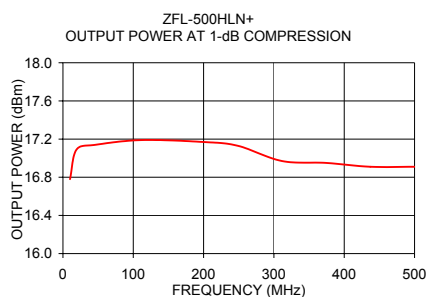
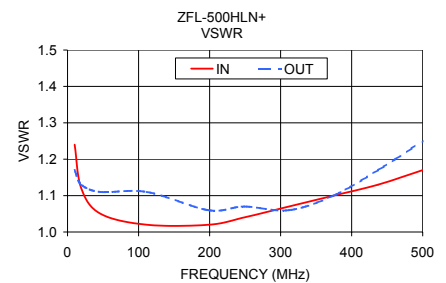
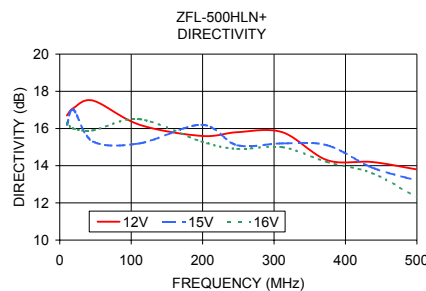
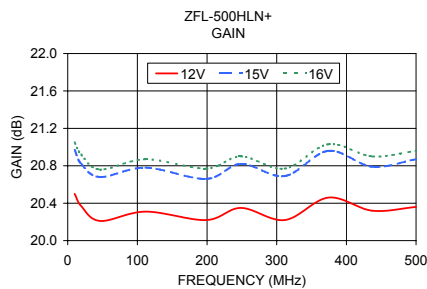
IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

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		
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



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MOLStore/terms.jsp.