

Coaxial

Low Noise Amplifier

ZHL-0812HLN

50Ω

800 to 1200 MHz

Features

- very low noise, 1.5 dB max.
- wideband, 800 to 1200 MHz
- high dynamic range

Applications

- UHF
- cellular
- communication systems



ZHL-0812HLNX-S



ZHL-0812HLN-S

CASE STYLE: NN92

Connectors	Model	Price	Qty.
SMA	ZHL-0812HLN-S	\$399.50 ea.	(1-9)
SMA	ZHL-0812HLNX-S	\$389.50 ea.	(1-9)

Low Noise Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		NOISE FIGURE (dB)	GAIN (dB)		MAXIMUM POWER (dBm)		INTERCEPT POINT (dBm)	VSWR (:1) Max.		DC POWER	
	f_L	f_U		Min.	Flatness Max.	Output (1 dB Compr.) Typ.	Input (no damage)		In	Out	Volt (V) Nom.	Current (mA) Max.
ZHL-0812HLN	800	1200	1.5	30	±1.0	+26	+10	+36	2.4	2.4	15	725
ZHL-0812HLNX*	800	1200	1.5	30	±1.0	+26	+10	+36	2.4	2.4	15	725

* Heat sink not included

Noise Figure specified at room temperature, increases to 2.3 dB max. at +65°C

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum temperature to 65°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.8°C/W Max.

Maximum Ratings

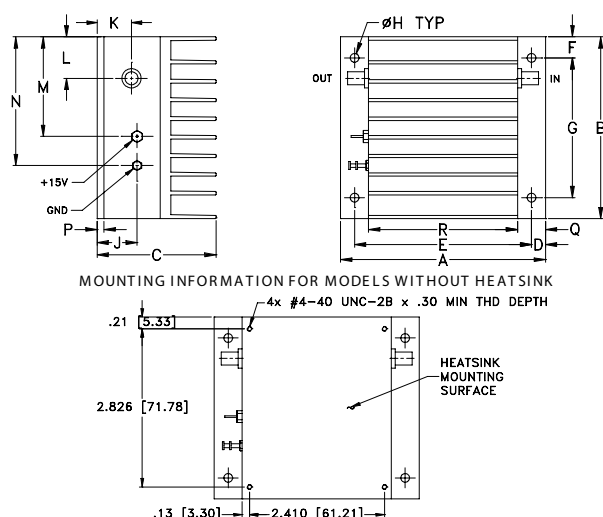
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

DC Voltage +20V 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	wt
3.66	3.25	2.13	.25	3.16	.38	2.50	.156	.72	.64	.74	1.78	2.30	.125	.50	2.66	grams*
92.96	82.55	54.10	6.35	80.26	9.65	63.50	3.96	18.29	16.26	18.80	45.21	58.42	3.18	12.70	67.56	500.0

*362 grams without heatsink

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs
& shopping online see web site

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IF/RF MICROWAVE COMPONENTS

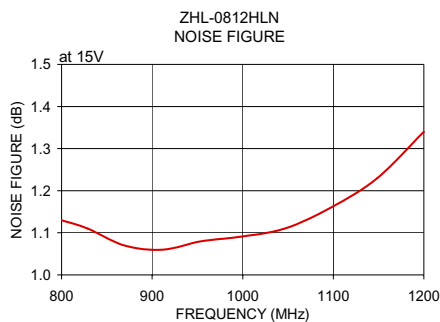
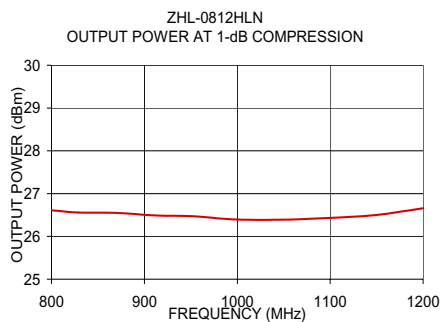
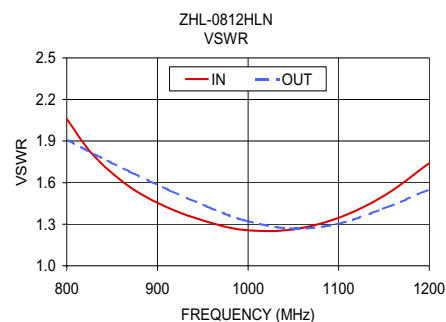
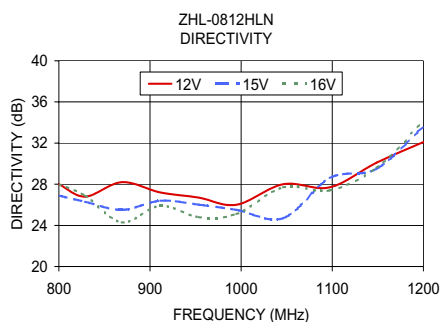
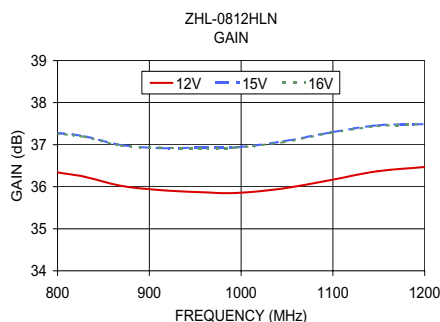
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established 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.

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Typical Performance Data/Curves

ZHL-0812HLN

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		
800.00	36.34	37.28	37.26	28.00	26.90	28.00	2.06	1.91	1.13	26.61
829.00	36.24	37.20	37.19	26.80	26.30	26.90	1.80	1.81	1.11	26.56
869.20	36.02	36.99	36.98	28.20	25.50	24.30	1.57	1.68	1.07	26.55
911.50	35.92	36.92	36.93	27.20	26.40	25.90	1.42	1.55	1.06	26.49
953.80	35.87	36.93	36.91	26.70	26.00	24.80	1.32	1.43	1.08	26.47
994.90	35.85	36.94	36.93	26.00	25.50	25.10	1.26	1.33	1.09	26.40
1046.20	35.96	37.08	37.06	28.00	24.70	27.70	1.26	1.27	1.11	26.39
1097.40	36.16	37.29	37.28	27.70	28.60	27.40	1.34	1.30	1.16	26.43
1148.70	36.37	37.46	37.44	30.10	29.50	29.60	1.50	1.41	1.23	26.50
1200.00	36.47	37.49	37.49	32.10	33.60	34.10	1.74	1.55	1.34	26.66



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