

Coaxial Amplifier

ZHL-3A+

50Ω Medium High Power 0.4 to 150 MHz

Features

- medium-high power, 29.5 dBm min.
- high IP3, +38 dBm typ.

Applications

- HF/VHF
- instrumentation
- communication systems



BNC version shown

CASE STYLE: S32

Connectors	Model
BNC	ZHL-3A+
SMA	ZHL-3A-S+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

MODEL NO.	FREQ. (MHz)		GAIN (dB)		MAXIMUM POWER OUTPUT (dBm)		DYNAMIC RANGE		VSWR (:1) Max.		DC POWER	
	f _L	f _U	Min.	Flatness Max.	(1 dB Compr.) Min.	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (A) Max.
ZHL-3A+	0.4	150	24	±1.0	+29.5	+20	11.0	+38	2.0	2.0	24	0.6

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

Maximum Ratings

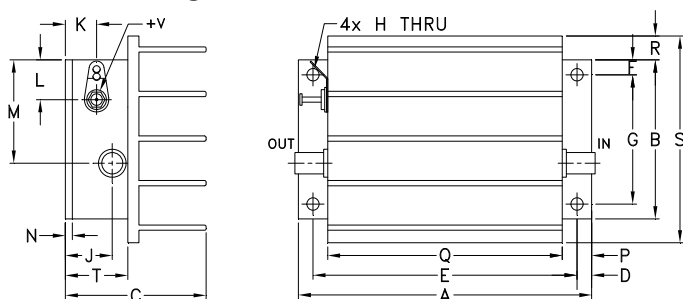
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

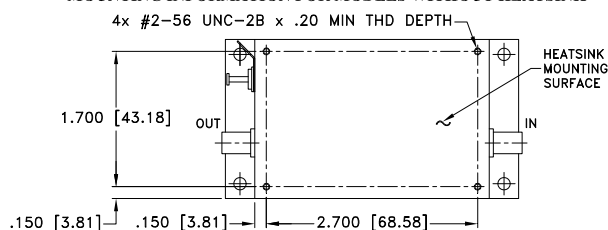
DC Voltage +25V Max.

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

Outline Drawing



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt	
3.75	2.00	1.80	.19	3.375	.19	1.625	.144	.50	.40	.50	1.30	.10	.38	3.00	.30	2.60	.80	grams	
95.25	50.80	45.72	4.83	85.73	4.83	41.28	3.66	12.70	10.16	12.70	33.02	2.54	9.65	76.20	7.62	66.04	20.32	220.0	
																		wt. w/o heat sink	150

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.

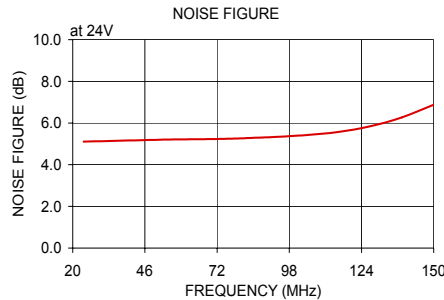
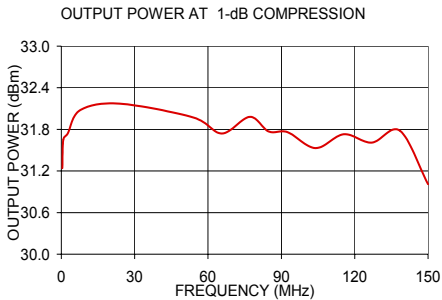
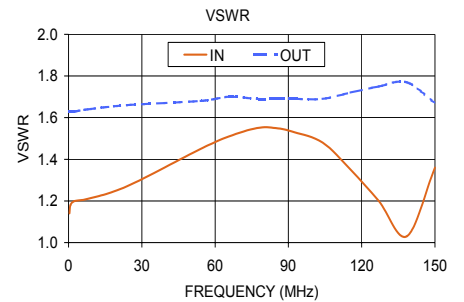
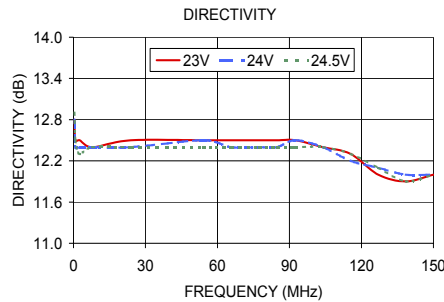
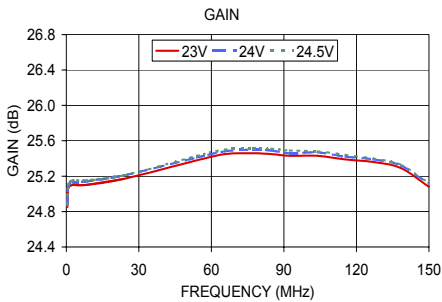
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. G
M162646
ZHL-3A+
171002
Page 1 of 2

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	P _{OUT} at 1 dB COMPR. (dBm)
	23V	24V	24.5V	23V	24V	24.5V	IN	OUT		
0.40	24.85	24.87	24.88	12.80	12.80	12.90	1.14	1.63	—	31.24
0.80	25.06	25.08	25.10	12.50	12.40	12.50	1.18	1.63	—	31.65
2.60	25.10	25.13	25.15	12.50	12.40	12.30	1.20	1.63	—	31.74
7.80	25.10	25.14	25.15	12.40	12.40	12.40	1.21	1.64	—	32.08
23.90	25.17	25.21	25.21	12.50	12.40	12.40	1.27	1.66	5.11	32.17
54.10	25.38	25.41	25.43	12.50	12.50	12.40	1.45	1.68	5.21	31.97
65.60	25.45	25.48	25.50	12.50	12.40	12.40	1.51	1.70	5.22	31.74
77.10	25.46	25.50	25.51	12.50	12.40	12.40	1.55	1.69	5.25	31.98
84.80	25.45	25.49	25.51	12.50	12.40	12.40	1.55	1.69	5.29	31.77
92.50	25.43	25.46	25.49	12.50	12.50	12.40	1.53	1.69	5.33	31.76
104.00	25.43	25.47	25.48	12.40	12.40	12.40	1.48	1.69	5.42	31.53
115.50	25.39	25.42	25.44	12.30	12.20	12.30	1.35	1.72	5.57	31.73
127.00	25.36	25.39	25.40	12.00	12.10	12.10	1.20	1.75	5.84	31.61
138.50	25.29	25.32	25.33	11.90	12.00	11.90	1.03	1.77	6.27	31.78
150.00	25.08	25.11	25.12	12.00	12.00	12.00	1.36	1.67	6.88	31.01



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.
- C. The parts covered by this specification document 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

