

# Coaxial Amplifier

## ZHL-1A+ ZHL-1A

50Ω Medium High Power 2 to 500 MHz

### Features

- wideband, 2 to 500 MHz
- high IP3, +38 dBm typ.
- medium high power, +28 dBm min.

### Applications

- VHF/UHF
- test set-ups
- instrumentation



BNC version shown

CASE STYLE: S32

Connectors	Model	Price	Qty.
BNC	ZHL-1A(+)	\$229.00	(1-9)
SMA	ZHL-1A-S(+)	\$239.00	(1-9)

### +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 <sub>L</sub>	f <sub>U</sub>	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-1A(+)	2	500	16	±1.0	+28	+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

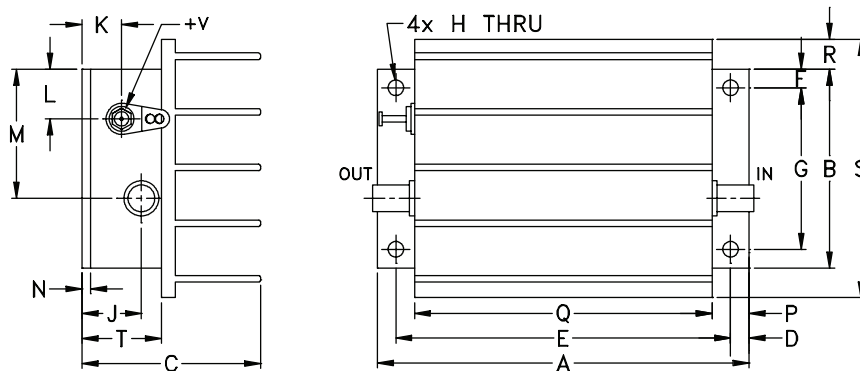
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

DC Voltage +24.5V 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
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

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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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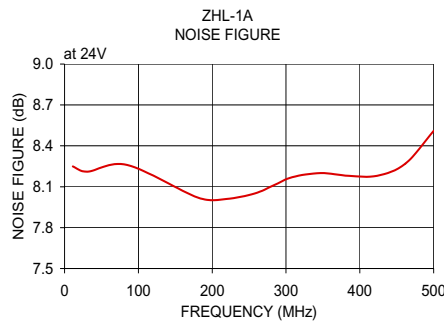
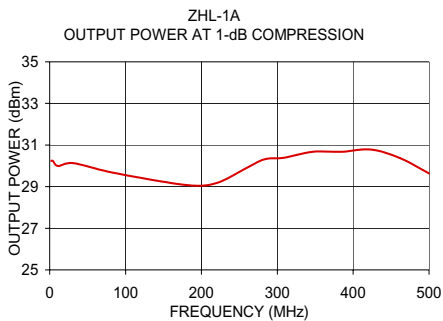
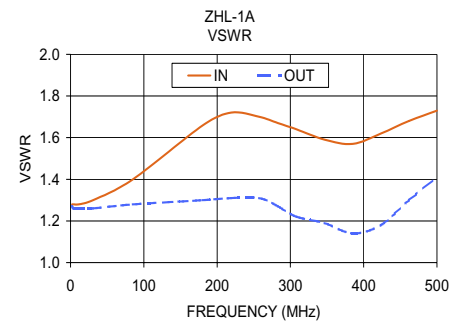
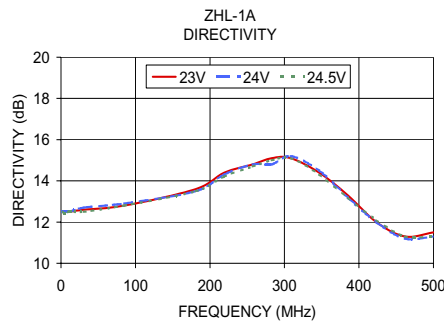
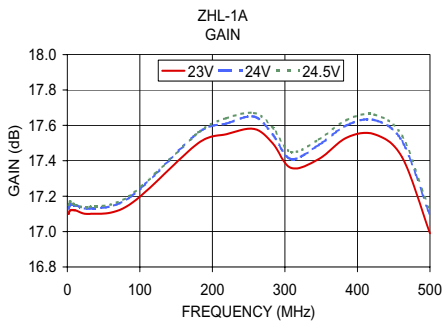
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# Typical Performance Data/Curves

# ZHL-1A+ ZHL-1A

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	23V	24V	24.5V	23V	24V	24.5V	IN	OUT		
2.00	17.10	17.13	17.15	12.50	12.50	12.50	1.28	1.27	—	30.24
4.00	17.12	17.15	17.17	12.50	12.50	12.40	1.28	1.26	—	30.24
11.00	17.12	17.15	17.15	12.50	12.50	12.50	1.28	1.26	8.25	29.99
30.60	17.10	17.13	17.14	12.60	12.70	12.50	1.30	1.26	8.21	30.13
85.00	17.15	17.19	17.20	12.80	12.90	12.80	1.40	1.28	8.26	29.66
180.80	17.50	17.56	17.56	13.60	13.50	13.50	1.66	1.30	8.02	29.08
219.10	17.55	17.61	17.64	14.40	14.30	14.20	1.72	1.31	8.01	29.17
257.40	17.58	17.65	17.67	14.80	14.80	14.70	1.70	1.31	8.05	29.86
282.90	17.50	17.55	17.59	15.10	14.80	15.00	1.67	1.27	8.11	30.31
308.50	17.36	17.41	17.45	15.10	15.20	15.10	1.64	1.22	8.17	30.39
346.80	17.41	17.49	17.52	14.40	14.50	14.30	1.59	1.19	8.20	30.68
385.10	17.53	17.60	17.63	13.30	13.20	13.20	1.57	1.14	8.18	30.68
423.40	17.55	17.63	17.66	12.00	12.00	12.10	1.62	1.18	8.18	30.78
461.70	17.42	17.51	17.54	11.30	11.20	11.30	1.68	1.30	8.27	30.37
500.00	16.99	17.09	17.11	11.50	11.30	11.30	1.73	1.41	8.51	29.64



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