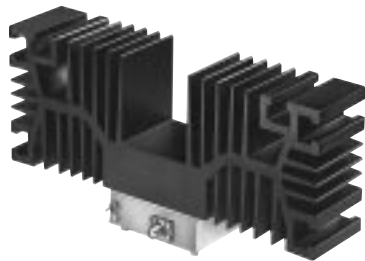
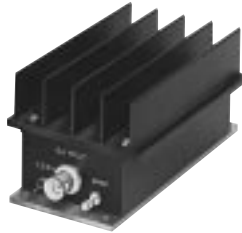


MEDIUM HIGH POWER 50 kHz to 8 GHz



✦ ZVE



ZHL-case T34



ZHL-case S32



ZHL-42

up to 1W (+30 dBm) output

MODEL NO.	FREQ. (MHz) f_L - f_U	GAIN (dB)		MAXIMUM POWER (dBm)		DYNAMIC RANGE		VSWR Max.		DC POWER		CASE STYLE Note B	PRICE \$ Qty. (1-9)
		Min.	Flatness Max.	Output (1 dB Comp.) Min.	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V)	Current (A)		
■ ZHL-450-75	5-450	9.3	±0.7	+26	+20	3.5✦	+48	2.5:1	1.6:1	12	0.525	S32	— 149.95
■ ZHL-1010-75	50-1000	9.5	±0.7	+26	+20	3.5	+47	1.5:1	1.5:1	12	0.525	S32	— 149.95
▲☆ ZHL-1010	50-1000	9.5	±0.6	+26	+22	3.5	46	2:1	2:1	12	0.525	S32	— 149.95
▲☆ ZHL-2010	50-1000	20	±0.8	+26	+11	3.7	46	2:1	2:1	12	0.90	S32	— 169.95
▲☆ ZHL-3010	50-1000	30	±1.0	+26	-3	5.5	46	2.5:1	2:1	12	1.0	S32	— 179.95
✦ ZVE-8G	2000-8000	30	±2.0	+30✦	+20	4	40	2:1	2:1	12	2.0	BN333	— 1095.00
ZHL-1A	2-500	16	±1.0	+28	+20	11	+38	2:1	2:1	24	0.60	S32	— 229.00
ZHL-2	10-1000	16	±1.0	+29	+15	9	+38	2:1	2:1	24	0.60	T34	— 349.00
ZHL-2-8	10-1000	27	±1.0	+29	+5	10	+38	2:1	2:1	24	0.60	T34	— 525.00
ZHL-211	800-950	20	±0.4	+29	+15	8	+38	1.8:1	1.8:1	24	0.60	T34	— 295.00
▲ ZHL-2-12	10-1200	24	±1.0	+29*	+10	4*	+38	2:1	2:1	24	0.75	T34	— 625.00
ZHL-3A	0.4-150	24	±1.0	+29.5	+10	11	+38	2:1	2:1	24	0.60	S32	— 229.00
ZHL-32A	0.05-130	25	±1.0	+29	+10	10	+38	2:1	2:1	24	0.60	S32	— 229.00
ZHL-42	700-4200	30	±1.0★	+28	+5	10	+38	2.5:1	2.5:1	15	0.88	U36	— 895.00
ZHL-4240	700-4200	40	±1.5★	+28	-5	8	+38	2.5:1	2.5:1	15	0.90	U36	— 1395.00
ZHL-42W	10-4200	30	±1.5★	+28**	0	8***	+38	2.5:1	2.5:1	15	0.88	U36	— 1095.00
ZHL-4240W	10-4200	40	±1.5★	+28**	-5	8***	+38	2.5:1	2.5:1	15	0.90	U36	— 1495.00

- * +28.5 dBm maximum at 1000-1200 MHz
- ** +27 dBm at 10-700 MHz
- *** Below 100 MHz NF increases to 15 dB at 10 MHz
- ✦ Below 100 MHz NF increases to 16 dB at 10 MHz
- ☆ At +25°C, +29 dBm typ. at 90°C case
- ★ Measured at 25°C.
- ✦ NF gradually increases from 3.5 dB at 50 MHz to 10 dB typ. at 10 MHz



ZHL-50P3

feed-forward, low-distortion

MODEL NO.	FREQ. (MHz) f_L - f_U	GAIN (dB)		MAXIMUM POWER (dBm)		DYNAMIC RANGE			VSWR In/Out	DC POWER		CASE STYLE Note B	PRICE \$ Qty. (1-9)
		Min.	Flatness Max.	Output (1 dB Comp.)	Input (no damage)	NF (dB) Typ.	Intercept Point (dBm) Min. 2nd** order In-Band	3rd* order		Volt (V)	Current (A)		
ZHL-2-50P3	50-1000	21	±1.0	+25	+15	8	+63	+43	2.0:1	24	0.65	U200	— 895.00 358.00★

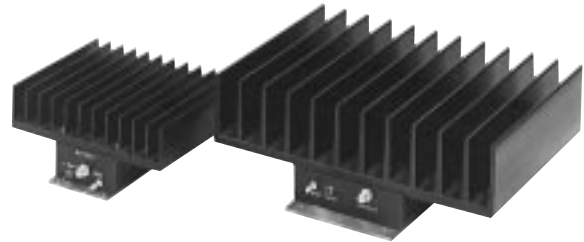
- ★ WHILE SUPPLIES LAST
- * IP3 measured at +15 dBm output each fundamental tone, at room temperature.
- ** IP2 +50 dBm typical for out band products.

50 & 75Ω

High Power 1 to 1000 MHz



ZHL-WF



ZHL-2W

ZHL-3W
ZHL-5W
ZHL-10W

up to 5W (+37 dBm) output

MODEL NO.	FREQ. (MHz) f_L - f_U	GAIN (dB)		MAXIMUM POWER (dBm)		DYNAMIC RANGE		VSWR		DC POWER		CASE STYLE Note B	CONNECTOR	PRICE \$ Qty. (1-9)
		Min.	Flatness Max.	Output (1 dB Comp.)	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V)	Current (A)			
ZHL-03-5WF	60-300	30	±1.0	+36	+10	4	+47	1.4:1	1.5:1	24	2.8	CP641	—	495.00
ZHL-1-2W	5-500	29	±1.0	+33	+10	12	+44	2:1	2:1	24	0.9	T35	—	525.00
ZHL-7-2W	600-800	28	±1.0	+33	+10	12	+43	2:1	2:1	24	0.9	T35	—	590.00 495.00★
ZHL-1000-3W	500-1000	38	±1.0*	+35**	0	9	+45	2:1	2.5:1	24	2.0	DDD338	—	695.00
ZHL-5W-1	1-500	40	±1.5	+37	0	9	+49	2:1	2.5:1	24	3.3	DDD131	—	995.00
ZHL-900-10W	480-900	19	±1.0	+38	+25	10	+50	2:1	2:1	24	5.5	DDD338	—	1995.00

★ WHILE SUPPLIES LAST

* 1.5 dB over temperature range -20 to +65 deg. C.

** +37 dBm typical

NOTES:

- ☆ High IP3, very high IP2, 68-83 dBm typ.
 - ♣ Hermetically sealed with field replaceable connectors.
 - ▲ Available only with SMA connectors
 - Denotes 75 ohm model, for coax connector models 75 ohm BNC connectors are standard.
 - B. Connector types and case mounted options, case finishes are given in section 0, see "Case styles & outline drawings".
 - C. Prices and specifications subject to change without notice.
 - D. For Quality Control Procedures see Table of Contents, Section 0, "Mini-Circuits Guarantees Quality" article. For Environmental Specifications see Amplifier Selection Guide.
1. Absolute maximum power, voltage and current rating:
 - 1a. 12V amps, 13 VDC (except ZVE-8G, 18VDC)
 - 1b. 15V amps, 20 VDC
 - 1c. 24V amps, 25 VDC (except ZHL-1A, 24.5 VDC; ZHL-03-5WF & ZHL-7-2W, 28 VDC)
 2. Open load is not recommended, potentially can cause damage. With no load, derate max input power by 20 dB.

NSN GUIDE MCL NO.

ZHL-1A	6130-01-088-2322
ZHL-1A(BNC)	5895-01-123-0792
ZHL-1A(SMA)	5895-01-201-4500
ZHL-2-12	5996-01-400-0753
ZHL-3A	5895-01-194-1718
ZHL-32A	5895-01-238-7973
ZHL-42(SMA)	5895-01-253-2397
ZHL-1042J	5996-01-412-3038
ZHL-4240	5895-01-263-5871
ZHL-5W-1	5825-01-339-2539

NSN



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