

High IP3

# Low Noise Amplifier

ZHL-1010+

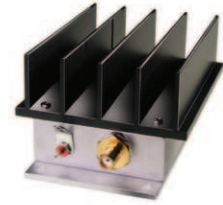
50Ω Medium High Power 50 to 1000 MHz

## Features

- wideband, 50 to 1000 MHz
- low noise, 3.5 dB typ.
- high IP3, +46 dBm typ.
- very high IP2, 68-83 dBm typ.

## Applications

- VHF/UHF
- cellular
- laboratory
- test equipment
- instrumentation



CASE STYLE: S32

Connectors	Model	Price	Qty.
SMA	ZHL-1010+	\$149.95	(1-9)

**+ 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.

## 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)	IP3 (dBm)	In	Out	Volt (V)	Current (A)
							Typ.	Typ.			Nom.	Max.
ZHL-1010+	50	1000	9.5	±0.6	+26	+22	3.5	+46	2.0	2.0	12	0.525

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

## Maximum Ratings

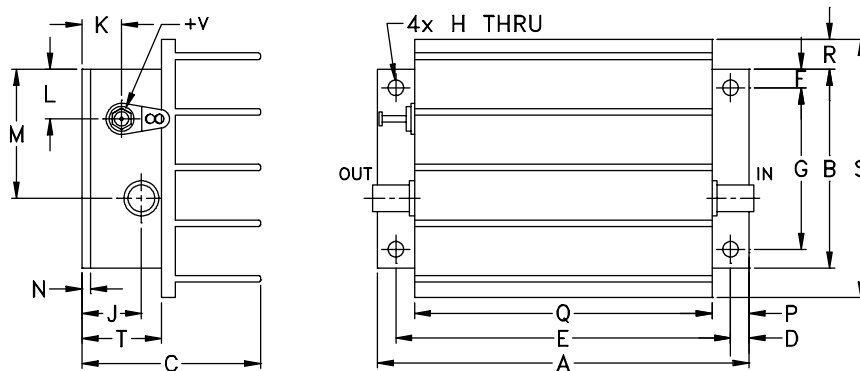
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

DC Voltage +13V 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



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](http://minicircuits.com)

IF/IRF 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](http://www.minicircuits.com/MCLStore/terms.jsp).

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	P <sub>OUT</sub> at 1 dB COMPR. (dBm)
	12V		IN	OUT		
50.00	10.65	7.00	1.97	1.94	3.95	29.05
155.60	10.94	6.50	1.69	1.69	3.15	29.31
261.10	11.06	6.30	1.34	1.37	3.11	29.86
366.70	11.12	6.30	1.07	1.18	3.17	30.45
472.20	11.06	6.50	1.17	1.27	3.27	30.45
577.80	11.01	6.80	1.28	1.36	3.36	30.26
683.30	11.01	7.00	1.26	1.36	3.48	29.66
788.90	10.92	7.30	1.15	1.29	3.55	29.39
894.40	10.84	7.80	1.05	1.27	3.62	28.69
1000.00	10.72	8.20	1.08	1.35	3.80	27.90

