

# High IP3 Low Noise Amplifier

## ZHL-2010+

50Ω Medium High Power 50 to 1000 MHz

### Features

- wideband, 50 to 1000 MHz
- low noise, 3.7 dB typ.
- high IP3, +46 dBm typ.
- very high IP2, 68-83 dBm typ.

### Applications

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



CASE STYLE: S32

Connectors	Model
SMA	ZHL-2010+

### +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-2010+	50	1000	20	±0.8	+26	+11	3.7	+46	2.0	2.0	12	0.90

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

### Maximum Ratings

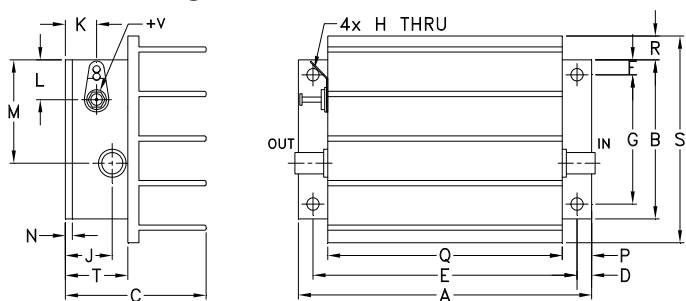
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

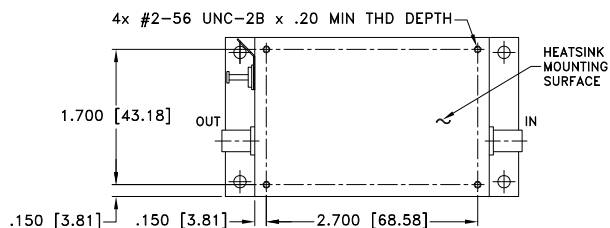
DC Voltage +13V Max.

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

### Outline Drawing



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



### Outline Dimensions (inch/mm)

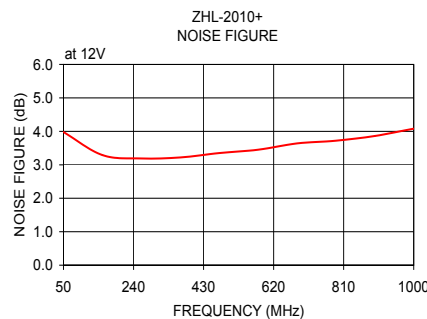
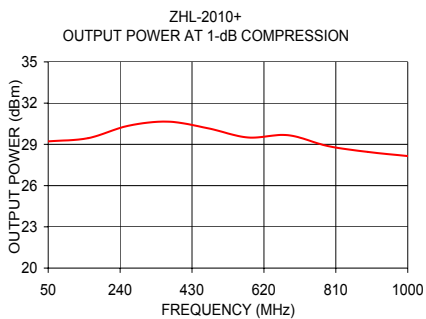
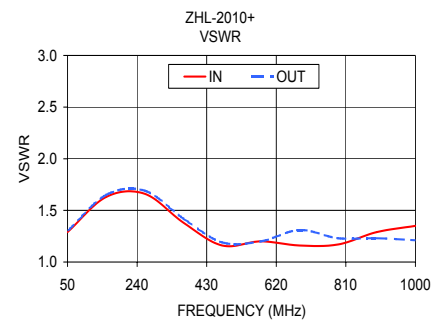
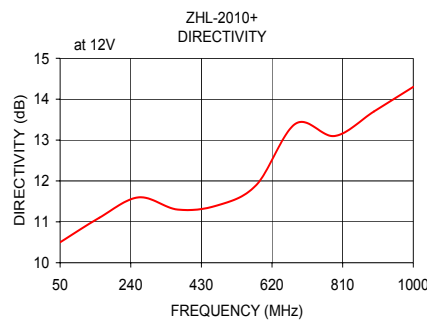
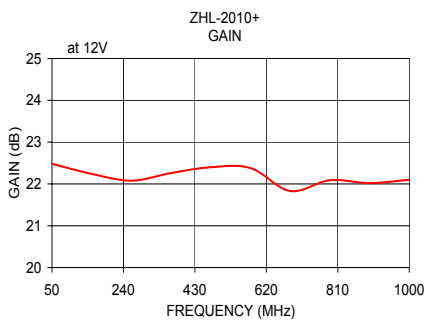
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt	
3.75	2.00	1.80	.19	3.375	.19	1.625	.144	.50	.40	.50	1.30	.10	.38	3.00	.30	2.60	.80	grams	
95.25	50.80	45.72	4.83	85.73	4.83	41.28	3.66	12.70	10.16	12.70	33.02	2.54	9.65	76.20	7.62	66.04	20.32	220.0	
																		wt. w/o heat sink	150

### Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	12V	IN	OUT	12V	12V
50.00	22.48	10.50	1.29	1.30	3.98	29.22
155.60	22.24	11.10	1.63	1.65	3.29	29.45
261.10	22.08	11.60	1.66	1.69	3.19	30.35
366.70	22.26	11.30	1.38	1.42	3.22	30.65
472.20	22.40	11.40	1.16	1.19	3.35	30.17
577.80	22.38	11.90	1.20	1.20	3.45	29.50
683.30	21.83	13.40	1.16	1.31	3.64	29.67
788.90	22.09	13.10	1.17	1.23	3.72	28.88
894.40	22.02	13.70	1.29	1.23	3.86	28.45
1000.00	22.10	14.30	1.35	1.21	4.08	28.15



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