

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



Generic photo used for illustration purposes only

CASE STYLE: S32

Connectors	Model
SMA	ZHL-1010+

+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 ¹ (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In ²	Out	Volt (V) Nom.	Current (A) Max.
ZHL-1010+	50	1000	9.5	±0.6	+26	+22	3.5	+46	2.0	2.0	12	0.525

1. Open load is not recommended, potentially can cause damage. With no load derate max input power by 20 dB.
2. Input VSWR may degrade at 50-150 MHz up to 2.2:1.

Maximum Ratings

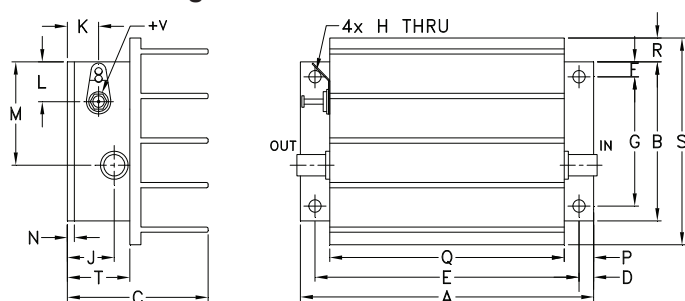
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

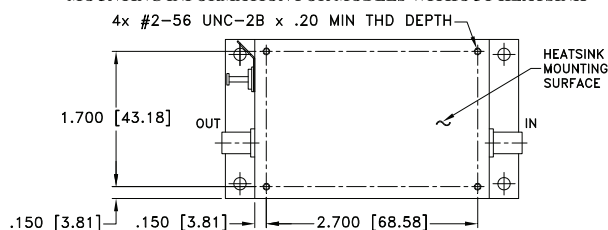
DC Voltage +13V Max.

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

Outline Drawing



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Outline Dimensions (inch/mm)

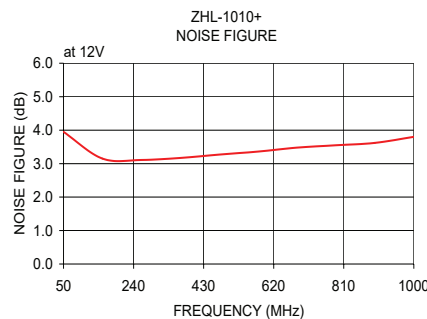
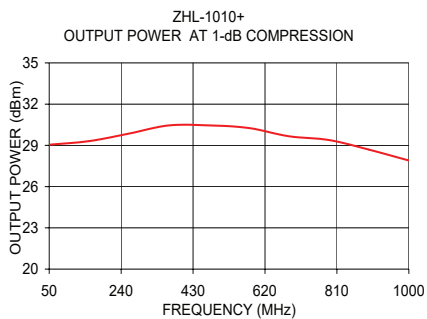
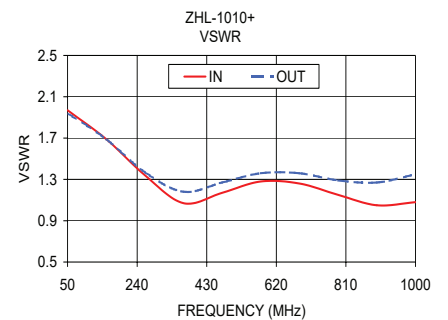
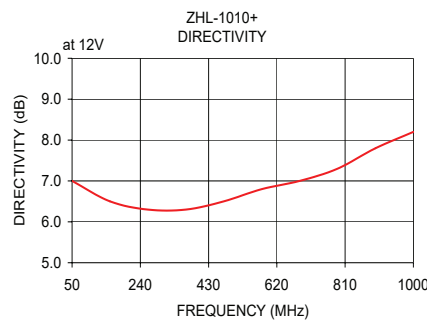
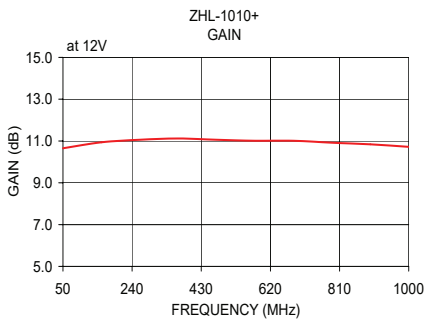
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt	
3.75	2.00	1.80	.19	3.375	.19	1.625	.144	.50	.40	.50	1.30	.10	.38	3.00	.30	2.60	.80	grams	
95.25	50.80	45.72	4.83	85.73	4.83	41.28	3.66	12.70	10.16	12.70	33.02	2.54	9.65	76.20	7.62	66.04	20.32	220.0	
																		wt. w/o heat sink	150

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)	P _{OUT} 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



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