

Coaxial Amplifier

ZHL-2-8

50Ω Medium High Power 10 to 1000 MHz

Features

- wideband, 10 to 1000 MHz
- high IP3, +38 dBm typ.
- medium high power, 29 dBm min.

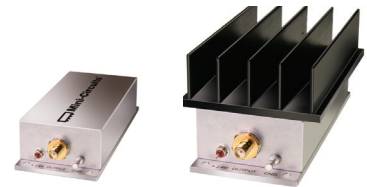
Applications

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

Not Recommended for New Designs

Recommended Replacement Part:

[ZHL-2-8+](#)
[ZHL-2-8X+](#)



ZHL-2-8X

ZHL-2-8

CASE STYLE: T34

Connectors	Model
SMA	ZHL-2-8-S
SMA	ZHL-2-8X-S

Electrical Specifications

MODEL NO.	FREQ. (MHz)		GAIN (dB)			MAXIMUM POWER OUTPUT (dBm)		DYNAMIC RANGE		VSWR (:1) Max.		DC POWER	
	f _L	f _U	Min.	Typ.	Flatness Max.	(1 dB Compr.) Min.	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (A) Max.
ZHL-2-8	10	1000	31	35	±1.0	+29	+5	10.0	+38	2.0	2.0	24	0.6
ZHL-2-8X*	10	1000	31	35	±1.0	+29	+5	10.0	+38	2.0	2.0	24	0.6

* Heat sink not included

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

To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum temperature to 65°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.35°C/W Max.

Maximum Ratings

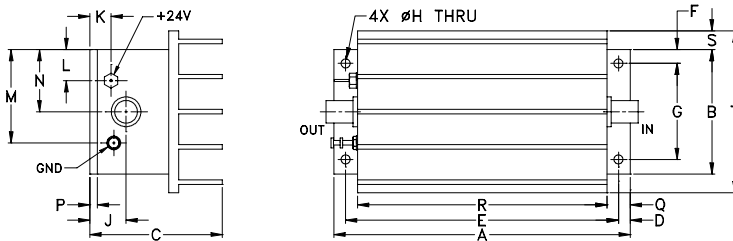
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

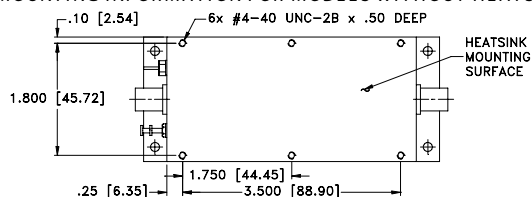
DC Voltage +25V Max.

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
4.75	2.00	2.12	.19	4.375	.23	1.540	.144	.58	.34	.50	1.50	1.00	.12	.38	4.00	.30	2.60	grams*
120.65	50.80	53.85	4.83	111.13	5.84	39.12	3.66	14.73	8.64	12.70	38.10	25.40	3.05	9.65	101.60	7.62	66.04	440.0

*325 grams without heatsink

Notes

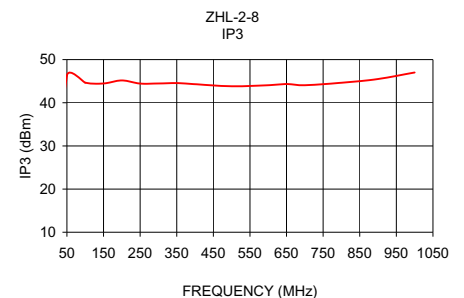
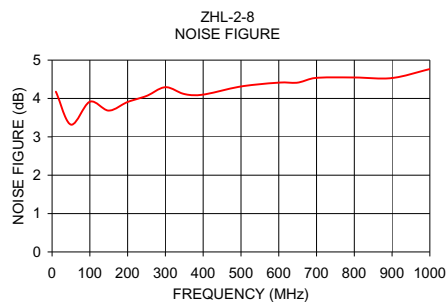
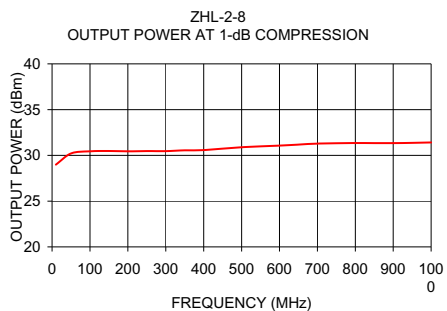
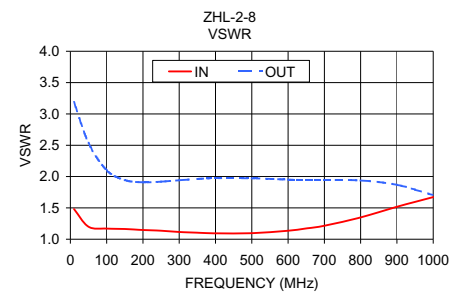
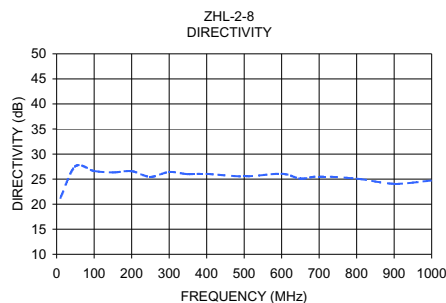
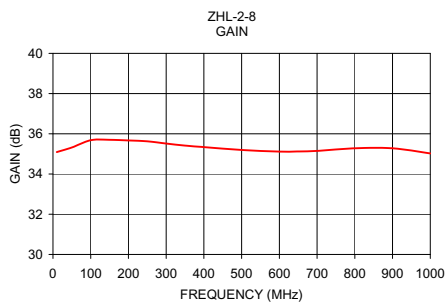
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FREQ. (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		POUT at 1 dB COMPR. (dBm)	NOISE FIGURE (dB)	IP3 (dBm)
	24V	24V	IN	OUT	24V	24V	24V
10.00	35.09	21.27	1.48	3.19	28.98	4.18	--
50.00	35.32	27.55	1.20	2.54	30.21	3.32	46.30
100.00	35.68	26.62	1.17	2.10	30.45	3.91	44.64
150.00	35.70	26.34	1.16	1.94	30.48	3.69	44.46
200.00	35.67	26.59	1.15	1.91	30.45	3.91	45.18
250.00	35.63	25.46	1.14	1.92	30.47	4.06	44.45
300.00	35.52	26.43	1.12	1.94	30.46	4.29	44.47
350.00	35.42	25.99	1.10	1.96	30.55	4.12	44.55
400.00	35.34	26.04	1.09	1.97	30.58	4.10	44.30
500.00	35.20	25.54	1.10	1.97	30.88	4.31	43.83
600.00	35.11	26.06	1.14	1.95	31.07	4.41	44.07
650.00	35.12	25.10	1.17	1.94	31.18	4.41	44.33
700.00	35.15	25.53	1.21	1.94	31.29	4.54	44.06
800.00	35.28	25.11	1.35	1.94	31.35	4.55	44.64
900.00	35.28	24.08	1.52	1.87	31.33	4.53	45.50
1000.00	35.02	24.73	1.67	1.70	31.41	4.77	47.02



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