

Coaxial Amplifier

50Ω High Isolation 10 to 500 MHz

ZFL-1HAD

Features

- wideband, 10 to 500 MHz
- active directivity (isolation-gain), 30 dB typ.

Applications

- VHF/UHF
- laboratory use
- receivers
- two-tone, 3rd order IM testing



CASE STYLE: SS98

Connectors	Model	Price	Qty.
SMA	ZFL-1HAD	\$210.00	(1-9)
BRACKET (OPTION "B")		\$2.50	(1+)

Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)	MAXIMUM POWER (dBm)	DYNAMIC RANGE		VSWR (:1) Typ.	ACTIVE DIRECTIVITY* (dB)				DC POWER	
	f_L	f_U			NF (dB) Typ.	IP3 (dBm) Typ.		L_w		U		Volt (V) Nom.	Current (mA) Max.
			Flatness Max. Total Range	Output (1 dB Compr.) L_w U Input (no damage)			In Out	Typ. Min.	Typ. Min.				
ZFL-1HAD	10	500	±1.0	+20 +20 +17	7.5	+30	1.3 1.35	30 20	25 18			15	115

*Active Directivity(dB)= Isolation (dB)- Gain (dB)

** Input VSWR in 10-20 MHz band increases to 1.45:1 at -20°C.

Below 50 MHz, NF increases to 11dB typ. at 10 MHz

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

L_w = low range (f_L to $f_U/2$)

U = upper range ($f_U/2$ to f_U)

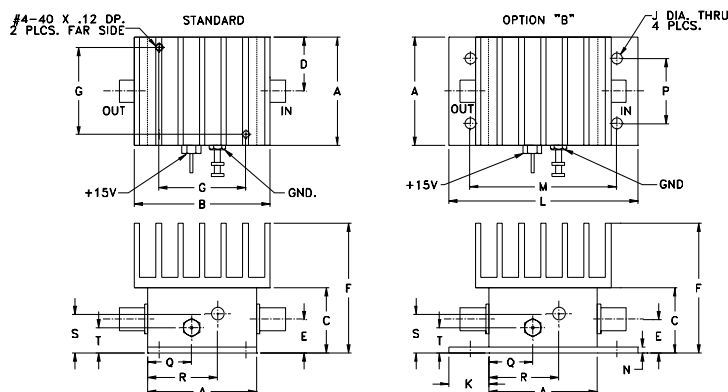
Maximum Ratings

Operating Temperature -20°C to 71°C

Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	
1.25	1.56	.75	.63	.39	1.50	1.000	--	.125	
31.75	39.62	19.05	16.00	9.91	38.10	25.40	--	3.18	
K	L	M	N	P	Q	R	S	T	wt
.46	2.18	1.688	.07	.750	.50	.80	.45	.29	grams
11.68	55.37	42.88	1.78	19.05	12.70	20.32	11.43	7.37	85.0



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M98087
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Typical Performance Data/Curves

ZFL-1HAD

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
10.00	11.57	11.63	11.65	27.40	27.50	27.40	1.13	1.11	6.77	20.80
19.30	11.30	11.37	11.38	30.10	30.20	30.20	1.21	1.10	6.78	22.17
46.50	11.31	11.38	11.40	31.10	31.20	31.20	1.21	1.09	6.75	22.56
111.80	11.48	11.56	11.58	31.60	31.70	31.50	1.18	1.12	6.76	22.61
198.50	11.61	11.74	11.76	32.40	32.60	32.80	1.16	1.17	6.82	22.21
248.70	11.74	11.90	11.94	32.70	33.30	33.40	1.15	1.19	6.93	21.99
311.50	11.89	12.13	12.18	31.40	32.60	33.00	1.14	1.19	7.05	21.71
374.40	12.08	12.38	12.45	28.30	29.20	29.30	1.13	1.17	7.19	21.35
437.20	12.23	12.60	12.69	25.20	25.50	25.60	1.13	1.12	7.33	21.27
500.00	12.37	12.83	12.94	21.60	21.70	21.70	1.17	1.07	7.46	21.26

