

Coaxial Amplifier

50Ω High Isolation 50 to 1000 MHz

ZFL-2HAD

Features

- wideband, 50 to 1000 MHz
- active directivity (isolation-gain), 30 dB typ. at 50-500 MHz

Applications

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



CASE STYLE: SS98

Connectors	Model	Price	Qty.
SMA	ZFL-2HAD	\$264.95	(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	Min.	m	Flatness Max. Total Range	L	U	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	L Typ.	L Min.	U Typ.	U Min.	Volt (V) Nom.	Current (mA) Max.
ZFL-2HAD	50	1000	11	±0.7	±1.0	+20	+20	+15	5.0	+33	2.0	2.0	30	20	21	15	15	110

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

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

L= low range (f_L to $f_U/2$) m= mid range ($2f_L$ to $f_U/2$) U= upper range ($f_U/2$ to f_U)

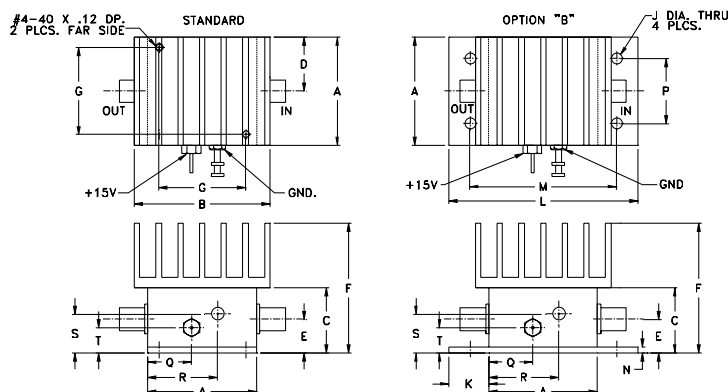
Maximum Ratings

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



INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

Mini-Circuits ISO 9001 & ISO 14001 Certified

REV. OR
M98087
ZFL-2HAD
051228
Page 1 of 2

Typical Performance Data/Curves

ZFL-2HAD

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		
50.00	11.90	12.16	12.15	47.00	46.20	47.30	1.01	1.28	6.78	21.73
100.00	11.88	12.14	12.13	39.00	41.00	41.00	1.02	1.28	5.91	21.67
150.00	11.90	12.15	12.14	35.70	36.80	37.60	1.02	1.28	5.57	21.66
200.00	11.89	12.15	12.14	33.30	34.50	34.50	1.03	1.29	5.30	21.57
250.00	11.95	12.19	12.18	31.10	32.00	32.40	1.04	1.29	5.16	21.53
300.00	12.03	12.28	12.27	29.40	30.50	30.60	1.06	1.30	5.03	21.51
350.00	12.05	12.29	12.28	27.80	29.10	29.20	1.08	1.30	4.91	21.43
400.00	12.12	12.36	12.35	26.30	27.60	28.10	1.10	1.31	4.80	21.36
450.00	12.19	12.43	12.42	25.10	26.20	26.70	1.12	1.32	4.66	21.31
500.00	12.26	12.49	12.48	24.00	25.20	25.70	1.15	1.32	4.56	21.32
550.00	12.34	12.57	12.55	22.90	24.20	24.60	1.18	1.33	4.44	21.28
600.00	12.40	12.62	12.60	22.00	23.30	23.70	1.21	1.34	4.34	21.24
650.00	12.49	12.70	12.68	21.10	22.30	22.80	1.25	1.35	4.22	21.19
700.00	12.56	12.77	12.76	20.10	21.50	21.80	1.29	1.37	4.13	21.14
750.00	12.66	12.85	12.83	19.20	20.50	21.00	1.33	1.38	4.05	21.14
800.00	12.60	12.80	12.79	18.60	20.10	20.60	1.37	1.39	3.97	21.12
850.00	12.79	12.99	12.98	17.60	19.00	19.60	1.42	1.40	3.90	21.05
900.00	12.62	12.81	12.79	17.30	18.70	19.30	1.47	1.42	3.82	21.11
950.00	12.72	12.91	12.89	16.50	17.90	18.60	1.52	1.43	3.75	21.05
1000.00	12.71	12.88	12.86	15.90	17.30	17.90	1.58	1.45	3.64	21.06

