

# Coaxial High Pass Filter

# ZFHP-0R50-S+

## Typical Performance Data

FREQ.  (MHz)	INSERTION LOSS			INPUT RETURN LOSS			OUTPUT RETURN LOSS		
	(dB)			(dB)			(dB)		
	@-40°C	@+25°C	@+85°C	@-40°C	@+25°C	@+85°C	@-40°C	@+25°C	@+85°C
0.030	66.97	67.84	67.41	0.01	0.01	0.01	0.00	0.00	0.01
0.110	85.61	85.75	82.23	0.04	0.03	0.04	0.04	0.03	0.03
0.120	74.50	74.84	76.11	0.05	0.04	0.05	0.04	0.03	0.04
0.160	62.12	61.44	61.72	0.11	0.08	0.09	0.08	0.05	0.07
0.205	80.85	68.59	69.86	0.26	0.18	0.21	0.15	0.10	0.13
0.210	89.53	72.08	74.26	0.29	0.20	0.22	0.16	0.11	0.14
0.220	80.60	85.21	86.90	0.35	0.24	0.27	0.20	0.13	0.16
0.240	58.69	70.70	67.20	0.54	0.35	0.40	0.30	0.17	0.24
0.245	54.91	64.44	61.76	0.61	0.39	0.45	0.34	0.19	0.26
0.250	52.16	59.57	57.55	0.68	0.43	0.50	0.39	0.21	0.29
0.285	22.26	46.52	38.76	1.60	0.89	1.07	1.33	0.48	0.74
0.295	10.21	28.70	24.10	3.09	1.13	1.42	3.17	0.71	1.16
0.305	3.19	16.08	12.15	10.59	1.78	2.59	11.67	1.59	2.84
0.310	2.10	10.51	7.32	17.23	2.64	4.36	21.50	2.65	4.92
0.315	1.61	5.87	4.10	20.86	4.88	8.06	29.42	5.03	8.95
0.320	1.36	3.10	2.51	18.66	9.49	13.81	20.17	9.73	16.11
0.325	1.21	1.89	1.82	16.97	16.79	19.48	17.66	18.23	37.65
0.334	1.01	1.22	1.35	15.97	19.88	17.54	16.66	22.16	19.10
0.345	0.83	0.96	1.07	16.11	15.87	15.83	17.01	16.01	16.51
0.365	0.61	0.67	0.75	16.94	16.63	17.00	17.68	17.27	18.12
0.400	0.45	0.41	0.49	16.78	19.71	18.71	16.83	20.24	19.26
0.455	0.32	0.30	0.35	16.87	18.30	17.50	17.00	18.26	17.56
0.550	0.20	0.22	0.24	20.52	18.99	19.11	21.59	19.50	19.76
0.650	0.14	0.14	0.16	21.59	21.63	21.90	22.55	22.64	23.22
0.900	0.14	0.10	0.12	17.68	21.22	20.42	17.74	21.53	20.71
1.250	0.12	0.08	0.10	17.23	20.35	19.55	17.21	20.38	19.59
2.350	0.06	0.05	0.06	20.39	23.09	22.41	20.36	23.07	22.39
2.800	0.05	0.04	0.05	21.61	24.28	23.62	21.59	24.25	23.59
9.000	0.03	0.02	0.04	29.70	32.25	31.81	29.70	32.24	31.85
16.000	0.05	0.06	0.08	32.23	34.25	34.53	32.32	34.36	34.58
23.000	0.08	0.10	0.13	32.97	35.22	36.39	33.44	35.48	35.82
42.000	0.11	0.13	0.15	34.38	37.67	40.64	37.38	38.05	35.68
78.000	0.11	0.14	0.16	36.70	40.10	45.33	50.45	39.81	34.86
86.000	0.19	0.21	0.22	41.86	48.58	45.67	40.57	47.75	39.69
92.000	0.13	0.16	0.17	40.45	43.88	47.83	58.57	42.94	36.08
100.000	0.11	0.14	0.16	39.28	42.38	48.16	45.93	41.27	35.93
165.000	0.12	0.15	0.17	38.87	45.16	38.37	34.82	41.47	42.79
195.000	0.16	0.20	0.22	40.37	41.63	35.87	35.72	39.82	39.68
215.000	0.28	0.31	0.32	32.43	35.00	34.62	31.04	32.65	34.30
230.000	0.22	0.26	0.28	30.22	35.63	39.85	29.46	32.59	35.39
250.000	0.19	0.23	0.25	30.26	38.43	57.93	29.65	34.92	37.83
320.000	0.17	0.21	0.24	31.41	41.72	35.91	29.77	35.17	34.45
350.000	0.19	0.24	0.27	33.21	40.26	34.21	29.55	33.20	33.41
370.000	0.22	0.28	0.31	36.46	39.54	32.96	29.23	31.87	32.79
395.000	0.27	0.33	0.36	41.97	41.57	33.05	29.53	31.70	32.60
415.000	0.29	0.36	0.39	42.56	41.92	33.10	30.28	31.24	31.08
435.000	0.36	0.42	0.45	46.52	40.53	32.61	28.80	29.04	28.72
455.000	0.46	0.51	0.52	41.25	40.00	33.07	26.23	26.91	27.08
470.000	0.50	0.53	0.54	36.49	39.79	34.46	25.01	26.13	26.76
505.000	0.38	0.44	0.46	32.25	38.91	45.47	25.52	27.01	28.22
535.000	0.30	0.37	0.40	31.80	37.36	45.06	26.84	28.25	29.47
575.000	0.25	0.33	0.37	31.16	35.38	38.03	27.45	28.74	29.65
680.000	0.29	0.38	0.42	29.58	31.44	31.50	25.88	26.64	26.81
725.000	0.33	0.43	0.48	30.08	30.89	30.61	25.32	25.53	25.48
745.000	0.37	0.48	0.53	30.02	30.58	30.31	24.84	24.84	24.82
750.000	0.42	0.52	0.57	30.11	30.61	30.33	24.58	24.57	24.59
800.000	0.58	0.68	0.73	29.77	29.89	29.84	21.87	21.91	22.16
850.000	0.90	0.98	1.00	30.69	30.47	30.63	18.68	19.02	19.48
925.000	1.09	1.16	1.19	37.64	38.45	39.04	17.16	17.62	17.90
1000.000	0.76	0.88	0.96	29.74	33.06	33.67	18.21	18.56	18.61

## Typical Performance Data

FREQ.  (MHz)	GROUP DELAY		
	(nsec)		
	@-40°C	@+25°C	@+85°C
0.500	1218.99	1339.36	1306.70
0.550	1084.87	1186.45	1159.56
0.600	933.83	1015.78	994.59
0.650	772.68	833.85	819.53
0.700	630.71	677.68	667.03
0.750	526.08	564.00	555.39
0.850	384.20	411.40	405.10
0.950	294.41	314.57	309.77
1.000	261.51	278.87	275.21
1.100	210.72	224.46	221.55
1.150	191.10	203.36	200.81
1.300	146.49	155.23	153.18
1.450	116.21	122.77	121.47
1.550	100.78	106.52	105.18
1.650	88.68	93.61	92.32
1.750	78.32	82.56	81.93
1.850	69.91	73.73	73.01
2.050	56.59	59.64	59.10
2.150	51.27	54.17	53.38
2.200	49.18	51.63	51.15
2.250	47.04	49.33	48.94
2.450	39.53	41.45	41.08
2.700	32.48	33.98	33.73
2.850	29.17	30.53	30.12
2.950	27.43	28.68	28.34
3.000	26.24	27.74	27.32
3.250	22.54	23.50	23.32
3.450	20.11	20.93	20.80
3.850	16.01	16.87	16.77
6.000	8.89	9.30	9.14
8.000	4.97	5.21	5.15
10.000	3.09	3.27	3.22
14.000	1.66	1.74	1.70
23.000	0.73	0.73	0.69
24.000	0.68	0.68	0.65
25.000	0.65	0.65	0.62
31.000	0.51	0.52	0.50
37.000	0.44	0.45	0.43
41.000	0.41	0.42	0.40
42.000	0.40	0.42	0.39
43.000	0.40	0.42	0.40
49.000	0.39	0.39	0.38
70.000	0.35	0.35	0.34
77.000	0.37	0.38	0.36
84.000	0.32	0.24	0.17
85.000	0.23	0.15	0.12
86.000	0.10	0.08	0.07
87.000	0.00	0.04	0.07
89.000	0.01	0.13	0.19
90.000	0.11	0.22	0.25
92.000	0.33	0.35	0.33
96.000	0.39	0.38	0.35
100.000	0.34	0.34	0.32
210.000	0.23	0.23	0.21
245.000	0.31	0.30	0.28
440.000	0.27	0.27	0.24
455.000	0.21	0.22	0.21
675.000	0.33	0.33	0.31
735.000	0.33	0.34	0.32
750.000	0.32	0.32	0.30