

# Directional Coupler

# ZCDC10-K5R44W+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +25°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	(dB) OUT	CPL
10	0.02	42.36	27.64	46.90	55.98	42.63
500	0.47	11.05	42.06	38.73	36.72	51.01
1000	0.62	10.04	25.87	35.60	36.51	30.22
2000	0.74	9.71	26.61	41.05	34.46	32.75
4000	0.86	9.69	36.55	37.84	37.52	33.93
6000	0.96	9.76	29.02	31.19	27.99	25.12
8000	1.05	9.75	23.06	28.66	27.00	27.26
10000	1.15	9.59	21.62	27.99	32.71	26.86
11000	1.15	9.82	23.47	27.59	31.79	24.67
12000	1.15	10.19	24.26	27.65	31.22	34.04
13000	1.19	10.12	20.47	28.20	32.70	32.62
14000	1.22	10.20	19.05	27.73	32.16	29.09
15000	1.28	10.09	16.40	26.25	31.54	24.81
16000	1.31	10.12	16.10	24.13	29.33	24.05
17000	1.36	10.01	16.21	23.66	30.86	20.94
18000	1.37	10.23	17.92	24.04	28.64	20.27
19000	1.41	10.25	19.58	23.68	28.95	19.02
20000	1.48	9.96	20.03	23.78	27.72	20.61
21000	1.55	9.86	20.20	21.90	24.73	20.85
22000	1.57	9.90	18.79	22.57	26.65	20.72
23000	1.58	10.03	18.93	22.92	27.31	21.09
24000	1.60	10.02	18.96	26.11	33.56	20.36
25000	1.67	9.70	18.43	25.39	28.74	17.75
26000	1.72	9.70	20.50	25.50	29.18	18.77
27000	1.74	9.81	21.58	24.38	27.02	19.25
28000	1.80	9.82	22.24	22.98	25.13	20.18
29000	1.83	9.96	21.07	20.75	23.58	18.96
30000	1.80	10.31	20.17	23.98	29.86	17.97
31000	1.84	10.25	20.91	22.31	30.82	16.51
32000	1.86	10.52	23.19	24.66	34.76	16.21
33000	1.86	10.98	26.93	27.35	39.87	18.31
34000	1.98	10.56	21.50	25.84	29.78	20.69
35000	2.00	10.44	17.80	24.72	32.78	20.55
36000	2.05	10.44	15.67	26.08	32.42	18.61
37000	2.10	9.83	15.99	24.17	36.57	17.90
38000	2.12	9.99	16.22	26.56	28.33	20.36
39000	2.27	9.83	18.52	24.34	21.51	33.58
40000	2.22	9.73	19.73	22.32	19.28	25.34
43500	2.40	10.65	11.46	16.38	15.35	21.46



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IF/RF MICROWAVE COMPONENTS

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# Directional Coupler

# ZCDC10-K5R44W+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = -55°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	(dB) OUT	CPL
10	0.05	42.75	40.76	43.06	45.04	41.59
500	0.48	11.12	36.58	53.33	39.51	35.36
1000	0.62	10.07	25.74	33.14	35.95	29.02
2000	0.72	9.75	27.33	47.38	33.69	30.80
4000	0.82	9.76	31.91	31.22	31.41	28.72
6000	0.91	9.87	27.57	24.90	22.89	22.72
8000	0.97	9.83	23.68	24.15	21.75	25.56
10000	1.06	9.62	22.12	27.36	28.83	24.95
11000	1.06	9.86	23.21	26.99	30.41	23.52
12000	1.06	10.20	23.70	27.11	31.27	33.02
13000	1.11	10.13	19.67	26.29	30.17	28.32
14000	1.13	10.22	18.53	25.47	29.21	25.89
15000	1.20	10.12	15.95	22.43	25.31	22.73
16000	1.22	10.15	15.95	22.90	29.02	23.25
17000	1.27	10.06	16.36	22.40	28.90	21.02
18000	1.26	10.25	19.12	27.29	59.11	20.21
19000	1.30	10.32	22.27	26.33	34.61	18.89
20000	1.38	10.04	25.45	26.53	29.88	20.50
21000	1.46	10.06	22.45	20.99	22.16	20.37
22000	1.47	10.15	18.81	19.75	21.51	19.14
23000	1.49	10.27	17.59	18.25	19.13	18.97
24000	1.50	10.20	17.15	19.55	20.48	18.91
25000	1.61	9.81	16.03	17.95	17.87	17.54
26000	1.65	9.74	17.08	18.83	18.34	19.91
27000	1.69	9.78	18.23	19.62	18.62	22.31
28000	1.75	9.77	20.00	20.89	19.68	24.96
29000	1.78	9.86	20.82	20.76	19.26	22.60
30000	1.80	10.15	23.18	22.81	22.13	20.25
31000	1.89	10.10	28.46	18.87	18.33	18.00
32000	1.90	10.52	32.97	17.47	17.05	17.70
33000	1.94	11.00	26.08	16.32	16.57	20.42
34000	1.98	10.77	18.41	16.41	17.02	21.56
35000	2.00	10.73	15.04	17.74	20.21	18.60
36000	1.91	10.70	13.78	20.89	26.19	15.68
37000	1.97	10.17	14.40	22.66	36.12	15.71
38000	1.98	10.28	16.28	22.52	21.54	17.39
39000	2.05	9.98	22.33	23.81	18.23	20.43
40000	2.02	9.99	35.18	23.30	16.61	21.31
43500	2.50	10.83	12.16	10.92	9.96	20.78

# Directional Coupler

# ZCDC10-K5R44W+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +100°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	(dB) OUT	CPL
10	0.02	42.76	34.93	49.01	57.23	42.70
500	0.46	11.04	37.51	34.85	33.58	44.80
1000	0.60	10.06	25.29	35.92	39.48	30.99
2000	0.72	9.72	25.02	38.64	33.69	32.88
4000	0.84	9.63	32.09	39.79	39.53	33.97
6000	0.94	9.75	28.59	29.15	25.98	25.13
8000	1.03	9.74	21.59	25.87	24.02	26.53
10000	1.14	9.55	19.78	27.03	31.09	25.83
11000	1.16	9.78	20.81	26.51	31.45	23.62
12000	1.16	10.16	20.72	26.65	32.02	30.35
13000	1.21	10.10	18.00	28.05	37.39	33.83
14000	1.24	10.19	17.02	28.79	36.55	31.28
15000	1.31	10.09	14.91	27.01	30.32	24.78
16000	1.35	10.08	14.84	26.00	33.32	23.79
17000	1.41	9.94	15.14	25.38	31.02	21.23
18000	1.42	10.17	16.95	28.58	43.99	20.71
19000	1.47	10.17	18.64	28.07	47.29	19.20
20000	1.54	9.93	19.33	27.65	36.06	20.34
21000	1.61	9.80	19.45	23.98	30.27	20.40
22000	1.64	9.90	17.88	23.04	30.95	20.90
23000	1.66	10.03	17.16	22.04	27.35	21.69
24000	1.69	10.04	16.52	23.66	30.68	20.57
25000	1.78	9.75	16.12	21.37	23.11	17.10
26000	1.81	9.78	17.44	22.01	23.68	17.64
27000	1.84	9.97	18.41	21.77	22.61	18.21
28000	1.89	10.01	19.78	21.75	21.38	19.63
29000	1.91	10.14	20.46	21.14	21.64	19.14
30000	1.91	10.42	20.21	25.95	25.82	18.67
31000	1.94	10.38	19.72	24.25	30.55	17.09
32000	1.97	10.55	19.20	25.10	40.31	16.02
33000	2.01	11.05	17.90	22.02	27.01	16.91
34000	2.13	10.61	15.63	20.17	25.29	18.53
35000	2.18	10.49	14.23	18.28	22.06	20.26
36000	2.19	10.45	13.56	19.63	24.66	20.26
37000	2.27	9.92	13.91	19.48	22.26	18.21
38000	2.32	10.07	14.65	23.13	20.54	20.02
39000	2.41	9.78	16.93	21.21	17.07	30.23
40000	2.45	9.68	18.05	19.06	15.27	25.82
43500	2.67	10.56	9.31	15.19	15.67	19.59