

# Directional Coupler

# TCD-10-1W-75+

## Typical Performance Data

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

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS (dB)		
				IN	OUT	CPL
10	1.54	10.28	20.27	16.16	22.09	16.02
20	1.52	10.27	20.52	16.51	23.48	16.34
25	1.52	10.27	20.56	16.57	23.73	16.39
50	1.53	10.29	20.51	16.65	24.02	16.49
75	1.53	10.30	20.44	16.74	24.12	16.59
100	1.53	10.31	20.35	16.86	24.18	16.67
125	1.53	10.32	20.13	16.92	24.15	16.74
150	1.53	10.32	20.05	16.92	24.13	16.81
175	1.53	10.33	19.80	16.91	24.06	16.88
200	1.53	10.33	19.64	16.91	23.89	17.01
225	1.53	10.34	19.36	16.95	23.79	17.16
250	1.53	10.33	19.26	16.98	23.72	17.25
275	1.52	10.34	18.89	16.99	23.50	17.29
300	1.52	10.33	18.65	17.00	23.22	17.42
325	1.52	10.33	18.46	16.94	22.94	17.59
350	1.51	10.33	18.11	16.89	22.70	17.65
375	1.51	10.33	17.90	16.83	22.52	17.74
400	1.51	10.32	17.66	16.80	22.40	17.88
425	1.51	10.33	17.35	16.83	22.24	17.98
450	1.51	10.32	17.09	16.88	21.86	18.07
475	1.51	10.32	16.91	16.96	21.44	18.11
500	1.51	10.32	16.52	16.93	21.12	18.26
525	1.51	10.31	16.47	16.88	21.01	18.43
550	1.50	10.32	16.00	16.80	20.90	18.50
600	1.51	10.32	15.52	16.83	20.37	18.62
650	1.52	10.32	15.12	17.00	20.30	19.09
700	1.52	10.30	14.82	17.13	20.28	19.07
750	1.53	10.29	14.60	17.21	20.34	19.42
800	1.52	10.27	14.38	17.41	20.44	19.52
850	1.52	10.25	14.13	17.83	20.97	19.65
900	1.53	10.24	13.88	18.14	20.96	20.22
950	1.53	10.23	13.64	18.34	21.39	20.11
1000	1.54	10.22	13.63	18.67	21.65	20.64
1100	1.53	10.16	13.68	19.07	22.78	20.81
1200	1.54	10.15	13.03	19.38	24.14	20.60
1300	1.59	10.17	11.97	18.99	25.25	20.37
1400	1.64	10.16	10.61	18.54	24.98	19.73
1500	1.71	10.12	9.42	17.92	25.12	18.83
1600	1.81	10.11	7.93	17.06	25.31	17.71
1700	1.94	10.15	7.00	16.36	25.27	16.46
1800	2.11	10.15	6.34	15.40	24.57	15.53
1900	2.28	10.22	5.99	14.98	24.49	14.51
2000	2.48	10.30	5.95	14.39	23.76	13.68
2100	2.63	10.48	5.93	14.13	22.24	13.02
2200	2.75	10.74	6.28	13.75	21.08	12.55
2300	2.86	11.00	6.15	13.29	20.04	12.07
2400	2.93	11.29	5.60	12.92	19.32	11.79
2500	3.03	11.49	4.48	12.64	18.73	11.59
2600	3.20	11.63	3.75	12.48	18.31	11.22
2700	3.54	11.51	2.74	12.44	17.84	10.92
2800	3.85	11.51	2.09	12.25	17.63	10.67
2900	4.21	11.53	2.13	11.81	17.37	10.50
3000	4.48	11.58	1.97	11.21	17.57	10.16

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# Directional Coupler

# TCD-10-1W-75+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = -40°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS (dB)		
				IN	OUT	CPL
10	1.53	10.13	19.08	15.43	18.71	15.25
20	1.36	10.03	19.75	17.36	23.06	17.17
25	1.34	10.03	19.95	17.87	24.46	17.66
50	1.29	10.02	20.31	19.11	27.91	18.91
75	1.28	10.03	20.31	19.31	29.51	19.15
100	1.28	10.03	20.27	18.80	30.34	18.65
125	1.28	10.04	20.07	18.41	30.36	18.27
150	1.29	10.04	20.05	18.52	29.97	18.39
175	1.29	10.04	19.81	18.81	29.50	18.80
200	1.29	10.05	19.69	18.69	28.75	18.92
225	1.29	10.04	19.44	18.19	28.07	18.57
250	1.30	10.04	19.29	17.78	27.38	18.16
275	1.30	10.04	18.95	17.73	26.44	18.05
300	1.30	10.04	18.77	17.80	25.52	18.25
325	1.30	10.04	18.60	17.61	24.65	18.36
350	1.30	10.04	18.25	17.20	23.90	18.12
375	1.30	10.04	18.03	16.86	23.30	17.86
400	1.31	10.03	17.82	16.72	22.81	17.83
425	1.31	10.03	17.54	16.74	22.41	17.95
450	1.31	10.03	17.28	16.67	21.80	18.00
475	1.32	10.03	17.11	16.51	21.24	17.86
500	1.32	10.03	16.71	16.35	20.77	17.77
525	1.31	10.02	16.70	16.30	20.56	17.82
550	1.32	10.03	16.23	16.24	20.35	17.88
600	1.32	10.03	15.78	16.12	19.65	17.88
650	1.33	10.01	15.42	16.35	19.36	18.26
700	1.34	10.00	15.19	16.61	19.16	18.43
750	1.34	9.97	15.03	16.88	19.07	18.84
800	1.33	9.94	14.87	17.45	19.15	19.33
850	1.33	9.92	14.72	18.20	19.73	19.76
900	1.34	9.89	14.55	19.31	20.05	20.94
950	1.33	9.87	14.46	20.09	20.70	21.64
1000	1.33	9.84	14.62	20.90	21.40	22.85
1100	1.31	9.76	14.93	20.44	23.30	24.00
1200	1.31	9.72	14.37	18.74	25.85	22.70
1300	1.35	9.73	13.10	16.94	28.11	19.69
1400	1.39	9.71	11.37	15.73	27.23	17.41
1500	1.44	9.67	9.89	15.27	26.04	15.71
1600	1.52	9.65	8.22	15.36	24.35	14.48
1700	1.63	9.68	7.18	15.91	22.30	14.07
1800	1.80	9.69	6.56	17.28	20.20	14.61
1900	1.98	9.74	6.25	19.20	19.36	15.74
2000	2.18	9.82	6.36	19.00	19.02	17.29
2100	2.30	9.96	6.45	16.16	18.99	16.52
2200	2.40	10.27	6.88	13.34	19.87	13.73
2300	2.47	10.54	6.76	10.95	21.01	11.42
2400	2.51	10.85	6.04	9.35	21.92	9.16
2500	2.64	11.08	4.62	8.54	21.13	8.13
2600	2.82	11.26	3.64	8.26	19.59	7.29
2700	3.19	11.17	2.56	8.79	17.94	7.14
2800	3.51	11.28	1.71	9.95	16.66	7.90
2900	3.89	11.33	1.87	11.70	15.37	9.41
3000	4.22	11.54	1.71	14.64	14.71	11.73

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# Directional Coupler

# TCD-10-1W-75+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +85°C

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS (dB)		
				IN	OUT	CPL
10	1.80	10.54	20.17	15.04	20.06	14.85
20	1.79	10.53	20.24	15.16	20.75	14.97
25	1.79	10.53	20.21	15.13	20.85	14.94
50	1.79	10.54	20.12	14.84	20.94	14.66
75	1.80	10.55	20.00	14.88	20.92	14.68
100	1.79	10.55	19.91	15.33	20.89	15.08
125	1.79	10.56	19.71	15.77	20.87	15.54
150	1.78	10.57	19.63	15.84	20.98	15.72
175	1.77	10.57	19.33	15.70	21.07	15.68
200	1.77	10.57	19.15	15.69	21.13	15.76
225	1.75	10.57	18.88	16.00	21.26	16.12
250	1.75	10.56	18.75	16.38	21.42	16.55
275	1.74	10.57	18.41	16.58	21.50	16.81
300	1.73	10.56	18.19	16.55	21.55	16.92
325	1.73	10.56	17.98	16.45	21.57	16.98
350	1.72	10.56	17.65	16.52	21.61	17.09
375	1.72	10.56	17.42	16.70	21.71	17.39
400	1.71	10.56	17.21	16.86	21.86	17.78
425	1.71	10.57	16.89	16.97	21.93	18.05
450	1.71	10.57	16.61	17.00	21.76	18.19
475	1.70	10.57	16.38	17.06	21.54	18.22
500	1.70	10.58	16.03	17.13	21.42	18.42
525	1.70	10.57	15.94	17.19	21.50	18.69
550	1.69	10.58	15.48	17.16	21.49	18.82
600	1.69	10.59	14.97	17.11	21.08	18.88
650	1.70	10.60	14.54	17.26	21.16	19.21
700	1.70	10.60	14.21	17.23	21.09	19.20
750	1.70	10.59	13.96	17.10	21.04	19.39
800	1.70	10.58	13.68	17.19	21.02	19.35
850	1.70	10.58	13.40	17.34	21.35	19.31
900	1.70	10.58	13.08	17.46	21.01	19.62
950	1.71	10.59	12.84	17.57	21.31	19.36
1000	1.72	10.58	12.77	17.83	21.26	19.71
1100	1.73	10.54	12.72	18.41	22.04	19.71
1200	1.74	10.55	12.05	19.39	23.05	20.04
1300	1.80	10.59	11.09	19.93	24.16	20.73
1400	1.87	10.58	9.91	20.20	24.50	21.06
1500	1.95	10.55	8.89	19.30	25.67	21.00
1600	2.07	10.54	7.58	17.69	27.26	19.69
1700	2.21	10.57	6.74	16.19	29.58	17.57
1800	2.37	10.58	6.09	14.59	31.30	15.77
1900	2.54	10.64	5.77	13.87	31.67	13.99
2000	2.71	10.71	5.71	13.29	27.74	12.88
2100	2.85	10.88	5.68	13.42	23.91	12.32
2200	2.95	11.10	6.00	13.72	21.39	12.21
2300	3.08	11.33	5.90	14.14	19.96	12.41
2400	3.15	11.56	5.44	14.61	19.12	13.03
2500	3.28	11.70	4.52	14.97	18.92	13.57
2600	3.45	11.79	3.88	14.73	19.15	13.51
2700	3.79	11.62	2.94	14.00	19.25	12.86
2800	4.09	11.55	2.38	12.93	19.38	11.76
2900	4.41	11.52	2.40	11.70	19.00	10.84
3000	4.61	11.50	2.22	10.61	18.74	9.93

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