

Directional Coupler

TCD-10-1WX+

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
10.0	1.14	9.98	21.77	18.91	30.69	18.75
20.0	1.14	10.00	21.89	19.11	32.82	18.88
30.0	1.15	10.01	21.87	19.16	33.20	18.90
40.0	1.15	10.01	21.85	19.20	33.12	18.91
50.0	1.16	10.02	21.81	19.22	33.18	18.93
100.0	1.17	10.06	21.59	19.35	32.16	19.02
150.0	1.18	10.09	21.27	19.39	30.87	19.04
200.0	1.19	10.12	20.82	19.37	29.52	19.00
250.0	1.20	10.14	20.34	19.31	28.33	18.91
300.0	1.21	10.17	19.78	19.21	27.27	18.78
350.0	1.22	10.19	19.20	19.06	26.43	18.62
375.0	1.23	10.19	18.91	19.00	26.04	18.54
400.0	1.23	10.20	18.60	18.93	25.62	18.46
450.0	1.25	10.22	17.98	18.79	24.93	18.28
500.0	1.26	10.24	17.35	18.67	24.32	18.10
550.0	1.28	10.26	16.72	18.49	23.83	17.92
600.0	1.29	10.27	16.10	18.33	23.38	17.76
650.0	1.31	10.29	15.47	18.21	22.89	17.59
700.0	1.33	10.30	14.88	18.10	22.48	17.45
750.0	1.35	10.32	14.32	17.94	22.12	17.32
800.0	1.37	10.33	13.73	17.84	21.88	17.20
900.0	1.42	10.33	12.69	17.61	21.34	17.02
1000.0	1.48	10.34	11.70	17.35	20.97	16.89
1100.0	1.54	10.34	10.78	17.16	20.70	16.79
1200.0	1.62	10.33	9.95	16.91	20.50	16.72
1300.0	1.70	10.31	9.17	16.70	20.46	16.65
1400.0	1.80	10.29	8.46	16.46	20.46	16.62
1500.0	1.91	10.29	7.78	16.22	20.48	16.59
1600.0	2.03	10.28	7.13	15.93	20.72	16.57
1700.0	2.16	10.28	6.55	15.58	20.98	16.49
1800.0	2.31	10.29	5.98	15.17	21.37	16.34
1900.0	2.48	10.31	5.49	14.75	21.79	16.14
2000.0	2.67	10.36	5.00	14.24	22.34	15.86
2100.0	2.87	10.42	4.57	13.73	22.92	15.48
2200.0	3.10	10.51	4.13	13.16	23.63	14.99
2300.0	3.33	10.63	3.67	12.57	24.72	14.41
2400.0	3.58	10.78	3.33	11.95	25.37	13.73
2500.0	3.85	10.94	2.97	11.38	26.18	13.07
2600.0	4.13	11.12	2.63	10.79	26.20	12.41
2700.0	4.42	11.33	2.33	10.21	25.17	11.76
2800.0	4.71	11.57	2.08	9.66	23.64	11.09
2900.0	5.01	11.84	1.88	9.14	21.80	10.40
3000.0	5.30	12.10	1.65	8.65	20.37	9.82
3100.0	5.58	12.38	1.50	8.18	18.96	9.26
3200.0	5.86	12.64	1.34	7.77	17.63	8.77
3300.0	6.13	12.93	1.26	7.37	16.46	8.31
3400.0	6.39	13.19	1.21	7.04	15.43	7.89
3500.0	6.64	13.45	1.19	6.70	14.51	7.51
3600.0	6.89	13.71	1.22	6.40	13.59	7.16
3700.0	7.11	13.95	1.26	6.12	12.94	6.88
3800.0	7.29	14.15	1.42	5.90	12.35	6.61
3900.0	7.52	14.35	1.59	5.68	11.80	6.40
4000.0	7.72	14.53	1.79	5.50	11.32	6.18



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Directional Coupler

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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
10.0	1.19	9.94	20.65	17.64	22.95	17.51
20.0	1.07	9.87	21.22	19.22	27.61	19.02
30.0	1.04	9.87	21.52	19.77	29.96	19.52
40.0	1.03	9.87	21.74	20.09	31.20	19.81
50.0	1.02	9.87	21.87	20.29	32.01	20.01
100.0	1.02	9.90	21.66	20.29	31.97	20.07
150.0	1.02	9.92	21.35	20.21	31.09	20.05
200.0	1.04	9.93	21.11	20.22	29.12	20.04
250.0	1.05	9.94	20.52	19.95	27.82	19.70
300.0	1.06	9.96	20.05	19.86	27.00	19.49
350.0	1.08	9.97	19.49	19.55	26.05	19.16
375.0	1.08	9.98	19.19	19.43	25.63	19.03
400.0	1.09	9.98	18.92	19.33	25.22	18.92
450.0	1.11	10.00	18.35	19.05	24.35	18.62
500.0	1.12	10.01	17.71	18.83	23.66	18.35
550.0	1.14	10.02	17.13	18.60	23.12	18.12
600.0	1.15	10.03	16.51	18.36	22.65	17.82
650.0	1.17	10.04	15.91	18.22	22.18	17.62
700.0	1.19	10.04	15.35	18.02	21.70	17.39
750.0	1.21	10.05	14.81	17.84	21.34	17.18
800.0	1.23	10.05	14.27	17.68	21.03	17.00
900.0	1.28	10.05	13.20	17.31	20.40	16.78
1000.0	1.34	10.05	12.20	16.97	19.94	16.50
1100.0	1.40	10.04	11.22	16.64	19.49	16.31
1200.0	1.47	10.02	10.39	16.36	19.25	16.48
1300.0	1.54	10.00	9.56	16.09	19.14	16.09
1400.0	1.64	9.98	8.78	15.84	19.13	16.31
1500.0	1.74	9.96	8.09	15.60	19.12	16.00
1600.0	1.85	9.95	7.36	15.41	19.39	16.12
1700.0	1.98	9.95	6.75	15.02	19.61	15.94
1800.0	2.12	9.96	6.18	14.69	20.05	15.84
1900.0	2.29	9.99	5.62	14.21	20.34	15.49
2000.0	2.48	10.03	5.13	13.67	20.97	15.59
2100.0	2.70	10.11	4.58	13.04	21.48	15.17
2200.0	2.92	10.22	4.15	12.74	22.62	14.34
2300.0	3.16	10.35	3.65	12.03	23.68	14.00
2400.0	3.44	10.53	3.24	11.33	24.66	13.14
2500.0	3.71	10.72	2.85	10.81	26.16	12.48
2600.0	4.01	10.94	2.50	10.30	26.98	11.65
2700.0	4.31	11.19	2.16	9.74	26.37	11.08
2800.0	4.64	11.49	1.88	9.13	24.35	10.35
2900.0	4.97	11.84	1.65	8.53	21.89	9.52
3000.0	5.26	12.13	1.40	8.08	20.21	9.14
3100.0	5.56	12.46	1.24	7.59	18.65	8.67
3200.0	5.85	12.81	1.08	7.16	17.16	8.04
3300.0	6.11	13.11	0.99	6.80	15.99	7.80
3400.0	6.38	13.44	0.93	6.43	14.87	7.28
3500.0	6.62	13.74	0.96	6.11	13.89	6.97
3600.0	6.86	14.04	0.97	5.81	13.00	6.67
3700.0	7.07	14.30	1.09	5.56	12.35	6.40
3800.0	7.25	14.52	1.30	5.33	11.77	6.17
3900.0	7.44	14.72	1.57	5.14	11.23	6.02
4000.0	7.64	14.93	1.81	4.91	10.78	5.74



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Directional Coupler

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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
10.0	1.36	10.19	21.76	17.49	26.57	17.45
20.0	1.36	10.19	21.69	17.60	27.21	17.52
30.0	1.37	10.20	21.57	17.62	27.40	17.50
40.0	1.38	10.21	21.45	17.61	27.45	17.47
50.0	1.38	10.23	21.36	17.62	27.58	17.46
100.0	1.39	10.26	21.18	17.93	27.29	17.65
150.0	1.40	10.30	20.81	18.13	26.91	17.81
200.0	1.40	10.34	20.20	18.14	26.96	17.79
250.0	1.40	10.37	19.76	18.27	26.68	17.86
300.0	1.40	10.40	19.16	18.24	26.18	17.83
350.0	1.41	10.44	18.53	18.18	25.85	17.77
375.0	1.41	10.46	18.23	18.20	25.63	17.76
400.0	1.41	10.47	17.93	18.19	25.35	17.73
450.0	1.43	10.51	17.28	18.14	24.89	17.65
500.0	1.43	10.55	16.62	18.13	24.51	17.56
550.0	1.45	10.58	15.99	18.07	24.20	17.49
600.0	1.46	10.61	15.37	18.00	23.92	17.43
650.0	1.47	10.64	14.75	17.97	23.59	17.39
700.0	1.49	10.67	14.17	17.93	23.28	17.32
750.0	1.51	10.69	13.63	17.86	23.03	17.24
800.0	1.53	10.71	13.09	17.86	22.91	17.21
900.0	1.57	10.73	12.11	17.80	22.55	17.15
1000.0	1.63	10.75	11.21	17.64	22.29	17.12
1100.0	1.70	10.76	10.38	17.50	22.07	17.07
1200.0	1.78	10.76	9.60	17.28	21.89	16.98
1300.0	1.86	10.74	8.90	17.12	21.90	17.01
1400.0	1.97	10.73	8.25	16.90	21.92	16.92
1500.0	2.08	10.72	7.65	16.70	21.95	16.95
1600.0	2.20	10.71	7.06	16.39	22.18	16.88
1700.0	2.33	10.70	6.53	16.02	22.35	16.82
1800.0	2.47	10.70	6.00	15.61	22.71	16.73
1900.0	2.63	10.70	5.56	15.26	23.11	16.64
2000.0	2.80	10.72	5.12	14.85	23.66	16.24
2100.0	2.98	10.74	4.79	14.45	24.01	15.90
2200.0	3.18	10.79	4.39	13.79	24.17	15.61
2300.0	3.37	10.84	3.99	13.31	24.88	15.12
2400.0	3.59	10.91	3.71	12.78	24.86	14.62
2500.0	3.80	10.98	3.42	12.27	24.78	14.02
2600.0	4.04	11.07	3.15	11.70	24.06	13.46
2700.0	4.28	11.18	2.89	11.15	23.07	12.78
2800.0	4.52	11.29	2.67	10.63	21.84	12.28
2900.0	4.78	11.43	2.51	10.14	20.67	11.69
3000.0	5.03	11.57	2.30	9.59	19.66	11.07
3100.0	5.27	11.72	2.16	9.15	18.54	10.38
3200.0	5.53	11.85	1.99	8.71	17.52	9.93
3300.0	5.78	12.03	1.91	8.33	16.47	9.33
3400.0	6.04	12.18	1.82	7.94	15.51	8.88
3500.0	6.31	12.35	1.74	7.51	14.71	8.42
3600.0	6.58	12.53	1.67	7.16	13.88	8.01
3700.0	6.83	12.71	1.64	6.83	13.17	7.65
3800.0	7.05	12.88	1.69	6.57	12.56	7.22
3900.0	7.32	13.04	1.70	6.27	12.00	6.93
4000.0	7.54	13.20	1.76	6.07	11.44	6.70



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