

Directional Coupler

TCD-10-4-75X+

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
5.0	1.15	9.96	21.68	18.55	27.11	18.57
10.0	1.11	9.94	21.94	19.10	31.36	19.13
15.0	1.09	9.93	22.07	19.43	34.47	19.46
20.0	1.08	9.93	22.07	19.53	36.44	19.58
25.0	1.08	9.94	22.07	19.58	37.25	19.62
50.0	1.10	9.95	21.96	19.63	37.20	19.70
75.0	1.11	9.97	21.77	19.69	35.24	19.72
100.0	1.12	9.98	21.65	19.72	33.42	19.75
150.0	1.14	10.00	21.22	19.72	30.56	19.81
200.0	1.16	10.02	20.67	19.70	28.55	19.95
250.0	1.17	10.03	20.18	19.65	26.79	19.97
300.0	1.19	10.04	19.56	19.67	25.31	20.05
350.0	1.21	10.05	19.00	19.59	24.23	20.15
400.0	1.22	10.05	18.54	19.52	23.60	20.19
425.0	1.23	10.06	18.22	19.55	23.02	20.24
450.0	1.25	10.06	17.99	19.62	22.99	20.31
475.0	1.26	10.06	17.84	19.69	22.64	20.38
500.0	1.27	10.07	17.43	19.77	22.40	20.42
525.0	1.28	10.06	17.44	19.78	22.50	20.45
550.0	1.29	10.07	16.99	19.80	22.08	20.50
575.0	1.31	10.06	17.04	19.87	22.21	20.57
600.0	1.32	10.09	16.58	20.01	22.20	20.64
650.0	1.36	10.07	16.35	20.52	22.39	20.77
700.0	1.39	10.08	16.20	20.92	22.38	20.88
750.0	1.42	10.06	16.15	21.35	22.71	21.00
800.0	1.45	10.05	16.09	22.19	23.53	21.09
850.0	1.48	10.04	16.06	23.15	24.47	21.16
900.0	1.52	10.04	15.95	23.87	25.20	21.19
925.0	1.54	10.02	16.12	24.32	25.95	21.19
950.0	1.56	10.03	15.90	24.96	26.21	21.21
1000.0	1.61	10.02	16.25	26.42	27.75	21.22
1050.0	1.64	10.00	16.57	27.60	29.57	21.15
1100.0	1.69	9.99	16.49	28.61	31.02	21.12
1150.0	1.74	9.98	16.23	30.14	32.10	21.10
1200.0	1.81	9.95	15.61	31.29	32.59	20.97
1300.0	1.96	9.91	14.12	30.76	30.76	20.77
1400.0	2.11	9.81	12.44	30.25	28.11	20.42
1500.0	2.27	9.73	11.31	28.59	26.50	19.82
1600.0	2.43	9.70	9.99	26.50	25.38	19.04
1700.0	2.63	9.77	9.45	25.07	25.03	18.05
1800.0	2.83	9.97	9.17	22.88	24.62	17.05
1900.0	3.08	10.11	9.30	21.09	25.13	15.96
2000.0	3.34	10.35	9.86	19.62	25.00	14.90
2100.0	3.65	10.59	10.11	17.79	26.20	13.90
2200.0	3.97	10.86	10.48	16.71	25.94	12.93
2300.0	4.28	11.26	9.45	15.26	26.68	12.06
2400.0	4.52	11.81	7.98	14.43	26.06	11.29
2500.0	4.72	12.51	6.19	13.73	24.97	10.65
2600.0	4.91	13.27	5.21	13.11	24.00	10.14
2700.0	5.08	14.22	4.25	12.81	22.06	9.78
2800.0	5.23	15.15	3.61	12.30	21.72	9.59
2900.0	5.45	16.02	4.17	12.11	20.06	9.50
3000.0	5.72	16.81	4.68	11.91	20.15	9.51



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Directional Coupler

TCD-10-4-75X+

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
5.0	1.22	9.99	21.36	17.51	22.55	17.61
10.0	1.09	9.90	21.84	19.10	27.40	19.19
15.0	1.01	9.85	22.10	20.12	31.63	20.21
20.0	0.99	9.84	22.14	20.58	35.24	20.66
25.0	0.99	9.84	22.20	20.86	38.85	20.92
50.0	0.99	9.84	22.15	21.96	50.17	22.01
75.0	1.00	9.85	22.02	22.22	39.34	22.27
100.0	1.00	9.86	21.88	21.44	35.34	21.51
150.0	1.02	9.86	21.46	20.64	32.09	20.83
200.0	1.03	9.87	20.98	21.31	31.00	21.64
250.0	1.04	9.87	20.47	20.19	29.53	20.55
300.0	1.06	9.88	19.87	19.90	27.50	20.46
350.0	1.07	9.87	19.32	19.77	25.62	20.55
400.0	1.09	9.86	18.90	19.06	24.19	19.86
425.0	1.10	9.87	18.58	19.05	23.31	19.88
450.0	1.11	9.86	18.35	19.21	23.06	20.01
475.0	1.12	9.86	18.22	19.22	22.52	20.00
500.0	1.13	9.86	17.79	19.06	22.14	19.81
525.0	1.14	9.85	17.82	18.89	22.13	19.61
550.0	1.15	9.86	17.36	18.87	21.62	19.58
575.0	1.17	9.85	17.44	19.01	21.66	19.67
600.0	1.18	9.86	16.96	19.18	21.57	19.71
650.0	1.21	9.84	16.78	19.53	21.54	19.65
700.0	1.24	9.83	16.69	20.21	21.34	19.88
750.0	1.26	9.81	16.71	20.89	21.53	20.05
800.0	1.29	9.79	16.77	22.08	22.25	20.30
850.0	1.31	9.77	16.84	23.87	23.22	20.90
900.0	1.35	9.76	16.83	25.26	24.22	21.09
925.0	1.37	9.74	17.13	26.39	25.25	21.26
950.0	1.38	9.74	16.98	28.15	25.84	21.69
1000.0	1.43	9.73	17.54	32.69	27.92	22.53
1050.0	1.46	9.71	18.09	36.83	30.17	23.01
1100.0	1.50	9.69	18.14	39.21	31.13	24.03
1150.0	1.55	9.67	17.89	37.25	30.66	24.85
1200.0	1.62	9.64	17.11	35.19	29.59	25.56
1300.0	1.76	9.58	15.15	38.15	26.43	24.69
1400.0	1.89	9.47	13.01	37.59	24.97	21.48
1500.0	2.04	9.36	11.70	28.57	24.27	18.57
1600.0	2.17	9.31	10.31	21.74	24.47	16.33
1700.0	2.35	9.35	9.78	18.76	24.66	14.85
1800.0	2.55	9.57	9.65	16.75	23.60	14.26
1900.0	2.81	9.70	9.90	16.61	22.77	14.40
2000.0	3.09	9.93	10.82	18.16	21.45	15.64
2100.0	3.41	10.15	11.17	19.56	21.65	17.36
2200.0	3.74	10.42	11.32	23.91	21.23	17.78
2300.0	4.04	10.79	9.90	20.06	21.87	14.83
2400.0	4.25	11.36	8.06	15.64	22.25	11.52
2500.0	4.40	12.13	6.07	12.05	23.50	8.95
2600.0	4.52	12.94	4.97	9.94	23.61	7.23
2700.0	4.57	14.03	4.04	8.69	21.52	6.31
2800.0	4.62	15.16	3.29	7.75	19.88	6.05
2900.0	4.84	16.04	4.11	8.11	17.30	6.48
3000.0	5.17	17.01	4.83	8.58	16.40	7.77



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Directional Coupler

TCD-10-4-75X+

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
5.0	1.36	10.10	20.97	17.43	25.06	17.50
10.0	1.32	10.08	21.18	17.80	27.08	17.90
15.0	1.30	10.07	21.30	17.99	28.36	18.11
20.0	1.29	10.07	21.32	18.00	28.89	18.14
25.0	1.29	10.07	21.33	17.95	29.13	18.08
50.0	1.30	10.10	21.15	17.60	29.47	17.70
75.0	1.31	10.11	21.05	17.56	29.01	17.64
100.0	1.32	10.12	20.97	18.01	28.33	18.07
150.0	1.33	10.15	20.67	18.80	27.06	18.85
200.0	1.34	10.18	20.12	18.47	26.01	18.67
250.0	1.36	10.20	19.69	19.08	24.93	19.49
300.0	1.37	10.23	19.13	19.59	24.15	20.07
350.0	1.39	10.25	18.57	19.53	23.60	20.16
400.0	1.41	10.27	18.18	20.05	23.51	20.95
425.0	1.42	10.28	17.87	20.37	23.23	21.34
450.0	1.43	10.29	17.62	20.57	23.45	21.45
475.0	1.44	10.30	17.47	20.67	23.29	21.53
500.0	1.46	10.32	17.06	20.80	23.27	21.64
525.0	1.47	10.32	17.05	20.92	23.55	21.86
550.0	1.48	10.33	16.60	21.00	23.27	22.11
575.0	1.50	10.34	16.64	21.08	23.58	22.23
600.0	1.52	10.37	16.16	21.19	23.59	22.28
650.0	1.54	10.37	15.87	21.53	23.97	22.28
700.0	1.58	10.39	15.64	21.62	23.94	22.41
750.0	1.61	10.39	15.48	21.69	24.00	22.37
800.0	1.64	10.40	15.36	22.16	24.46	22.10
850.0	1.68	10.41	15.21	22.41	25.04	21.93
900.0	1.71	10.42	14.95	22.46	25.23	21.77
925.0	1.74	10.41	15.05	22.59	25.50	21.52
950.0	1.76	10.43	14.80	22.93	25.45	21.23
1000.0	1.81	10.43	14.93	23.55	26.14	20.76
1050.0	1.85	10.42	15.08	23.66	27.02	20.46
1100.0	1.90	10.42	14.92	23.87	27.81	20.09
1150.0	1.95	10.42	14.57	24.85	28.44	19.80
1200.0	2.01	10.40	14.05	25.60	29.28	19.62
1300.0	2.15	10.38	12.82	25.72	30.45	19.60
1400.0	2.29	10.30	11.42	27.10	28.47	20.01
1500.0	2.45	10.26	10.43	28.85	27.48	21.07
1600.0	2.61	10.24	9.23	33.19	26.34	22.07
1700.0	2.80	10.33	8.68	34.72	26.68	21.55
1800.0	2.97	10.51	8.32	26.37	28.00	18.98
1900.0	3.19	10.65	8.36	21.34	31.35	16.36
2000.0	3.39	10.86	8.74	18.52	39.83	14.31
2100.0	3.63	11.09	8.96	16.48	39.59	13.01
2200.0	3.87	11.30	9.46	15.49	31.96	12.22
2300.0	4.13	11.61	8.80	14.84	28.13	11.99
2400.0	4.36	12.00	7.65	15.00	27.27	12.16
2500.0	4.61	12.42	6.18	15.39	26.15	12.52
2600.0	4.89	12.89	5.49	15.84	27.78	12.79
2700.0	5.20	13.49	4.68	15.98	27.82	12.75
2800.0	5.49	14.08	4.36	15.30	30.57	12.24
2900.0	5.72	14.73	5.12	14.21	29.06	11.36
3000.0	5.94	15.30	5.92	13.15	28.84	10.42



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