

Directional Coupler

DBTC-6-4-75X+

Typical Performance Data

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

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	OUT	CPL
5.0	2.21	6.64	15.67	14.34	22.00	14.51
10.0	2.16	6.62	15.84	14.75	27.64	14.93
15.0	2.11	6.61	16.01	15.16	33.28	15.36
20.0	2.12	6.61	15.99	15.18	38.17	15.37
25.0	2.12	6.62	15.98	15.21	43.05	15.38
50.0	2.16	6.66	15.89	15.20	42.39	15.33
75.0	2.17	6.68	15.86	15.26	36.01	15.34
100.0	2.18	6.69	15.87	15.34	32.72	15.41
150.0	2.20	6.72	15.96	15.50	28.64	15.44
200.0	2.20	6.75	15.96	15.68	25.96	15.24
250.0	2.20	6.77	15.92	15.86	23.98	15.20
300.0	2.19	6.80	15.95	16.03	22.45	15.30
350.0	2.19	6.82	16.18	16.22	21.23	15.01
400.0	2.19	6.84	16.29	16.43	20.23	14.67
450.0	2.19	6.88	16.12	16.65	19.45	14.77
475.0	2.19	6.89	16.08	16.77	19.12	14.83
500.0	2.19	6.90	16.17	16.91	18.81	14.73
550.0	2.20	6.93	16.37	17.20	18.32	14.32
600.0	2.21	6.96	16.40	17.59	17.94	14.26
650.0	2.22	6.99	16.22	18.05	17.68	14.41
700.0	2.24	7.02	16.06	18.56	17.52	14.21
750.0	2.26	7.04	16.04	19.16	17.45	14.10
800.0	2.26	7.07	15.98	19.84	17.44	14.25
850.0	2.28	7.10	15.60	20.62	17.51	14.13
900.0	2.30	7.14	15.08	21.47	17.64	13.96
950.0	2.32	7.18	14.43	22.39	17.79	14.00
1000.0	2.33	7.23	13.61	23.35	17.98	13.77
1050.0	2.35	7.30	12.60	24.34	18.18	13.43
1100.0	2.36	7.38	11.80	25.21	18.38	13.27
1150.0	2.37	7.47	11.10	25.89	18.61	12.90
1200.0	2.38	7.59	10.19	26.28	18.78	12.43
1250.0	2.40	7.71	9.32	26.23	18.95	12.12
1300.0	2.42	7.82	8.67	25.98	19.13	11.71
1350.0	2.45	7.93	8.06	25.49	19.21	11.19
1400.0	2.48	8.01	7.56	25.08	19.28	10.82
1450.0	2.51	8.11	7.04	24.50	19.31	10.47
1500.0	2.58	8.21	6.69	24.04	19.26	10.00
1600.0	2.78	8.34	6.62	23.48	18.93	9.37
1700.0	3.06	8.50	6.42	23.33	18.37	8.73
1800.0	3.45	8.60	6.85	23.61	17.54	8.26
1900.0	3.79	8.84	6.34	24.33	16.48	7.94
2000.0	4.06	9.11	5.68	25.54	15.30	7.74
2100.0	4.24	9.54	4.39	27.73	14.00	7.72
2200.0	4.29	10.09	2.69	31.77	12.63	7.82
2300.0	4.46	10.48	1.47	42.06	11.63	7.85
2400.0	4.76	10.72	0.67	37.34	10.93	7.93
2500.0	5.46	10.67	0.72	27.56	10.40	7.98
2750.0	8.51	10.76	2.10	18.07	9.20	8.27
3000.0	11.79	12.55	0.45	14.07	8.77	8.21
3250.0	13.02	14.88	4.85	11.77	8.01	8.16
3500.0	15.94	16.35	6.90	10.37	7.16	8.11
3750.0	27.10	18.19	6.03	8.93	6.28	8.07
4000.0	31.38	21.71	8.27	7.86	5.69	7.91



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IF/RF MICROWAVE COMPONENTS

Directional Coupler

DBTC-6-4-75X+

Typical Performance Data

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

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	OUT	CPL
5.0	2.48	6.81	14.87	13.00	17.05	13.13
10.0	2.29	6.74	15.58	14.05	21.11	14.21
15.0	2.10	6.66	16.28	15.10	25.16	15.28
20.0	2.07	6.65	16.38	15.39	27.63	15.56
25.0	2.05	6.64	16.48	15.67	30.10	15.83
50.0	2.02	6.62	16.50	16.49	35.55	16.61
75.0	2.03	6.61	16.49	16.59	33.84	16.71
100.0	2.03	6.62	16.48	16.16	31.22	16.29
150.0	2.03	6.63	16.59	16.24	28.39	16.09
200.0	2.04	6.64	16.57	16.38	27.00	15.93
250.0	2.05	6.65	16.48	15.99	25.49	15.25
300.0	2.05	6.66	16.47	16.29	23.77	15.39
350.0	2.05	6.66	16.65	15.92	22.03	14.66
400.0	2.05	6.67	16.72	16.05	20.59	14.22
450.0	2.05	6.68	16.50	16.09	19.49	14.21
475.0	2.06	6.68	16.40	16.05	19.05	14.14
500.0	2.06	6.69	16.49	16.18	18.62	14.01
550.0	2.06	6.69	16.67	16.45	17.92	13.70
600.0	2.07	6.70	16.72	16.79	17.29	13.59
650.0	2.09	6.71	16.49	17.45	16.79	13.89
700.0	2.10	6.71	16.26	18.15	16.45	13.88
750.0	2.11	6.71	16.16	19.24	16.35	14.05
800.0	2.12	6.71	16.01	20.16	16.43	14.41
850.0	2.12	6.71	15.58	21.94	16.69	14.59
900.0	2.13	6.73	14.94	23.64	17.07	14.52
950.0	2.15	6.76	14.12	25.12	17.41	14.50
1000.0	2.16	6.78	13.27	25.43	17.82	14.10
1050.0	2.16	6.84	12.15	24.23	18.20	13.47
1100.0	2.16	6.91	11.27	22.87	18.60	12.91
1150.0	2.16	6.99	10.54	21.75	19.06	12.02
1200.0	2.16	7.11	9.65	20.84	19.49	11.36
1250.0	2.17	7.24	8.80	19.76	19.85	10.75
1300.0	2.18	7.35	8.13	19.47	20.05	10.08
1350.0	2.19	7.46	7.54	19.31	19.98	9.62
1400.0	2.18	7.55	7.08	19.47	19.75	9.33
1450.0	2.19	7.65	6.60	19.91	19.43	9.07
1500.0	2.23	7.75	6.26	21.11	19.06	8.86
1600.0	2.39	7.86	6.34	24.00	18.21	8.87
1700.0	2.64	7.97	6.28	31.42	17.53	8.98
1800.0	2.98	8.02	6.75	29.91	17.14	8.74
1900.0	3.29	8.16	6.23	22.80	16.84	8.39
2000.0	3.52	8.40	5.35	19.45	16.39	7.40
2100.0	3.64	8.76	3.99	17.52	15.46	6.48
2200.0	3.69	9.35	2.14	16.80	14.12	5.65
2300.0	3.85	9.74	0.94	17.43	12.90	5.18
2400.0	4.14	9.99	0.24	19.10	11.70	5.07
2500.0	4.81	9.96	0.49	23.94	10.52	5.56
2750.0	7.97	10.26	2.04	14.63	8.29	9.07
3000.0	11.35	12.49	1.40	8.18	8.23	8.98
3250.0	12.62	14.85	5.86	7.99	8.90	4.96
3500.0	16.31	16.54	7.36	13.71	9.42	3.71
3750.0	27.01	19.05	6.32	7.07	6.14	5.70
4000.0	26.58	21.70	8.22	1.66	4.17	11.73



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IF/RF MICROWAVE COMPONENTS

Directional Coupler

DBTC-6-4-75X+

Typical Performance Data

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

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING LOSS (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	OUT	CPL
5.0	2.35	6.73	15.28	13.87	20.73	13.98
10.0	2.29	6.71	15.46	14.28	25.87	14.39
15.0	2.24	6.70	15.64	14.69	31.00	14.80
20.0	2.25	6.71	15.60	14.62	32.90	14.73
25.0	2.26	6.72	15.56	14.56	34.79	14.65
50.0	2.31	6.76	15.46	14.17	33.63	14.19
75.0	2.34	6.79	15.43	14.21	31.78	14.14
100.0	2.34	6.81	15.47	14.68	30.11	14.56
150.0	2.35	6.85	15.57	15.08	27.49	15.03
200.0	2.34	6.88	15.57	15.05	25.27	14.72
250.0	2.34	6.92	15.57	15.85	23.58	15.27
300.0	2.33	6.95	15.60	16.11	22.36	15.60
350.0	2.31	6.98	15.85	16.44	21.46	15.41
400.0	2.31	7.02	15.95	16.94	20.80	15.35
450.0	2.30	7.06	15.83	17.29	20.28	15.47
475.0	2.30	7.08	15.78	17.47	20.08	15.52
500.0	2.30	7.10	15.88	17.71	19.85	15.46
550.0	2.31	7.15	16.10	17.99	19.56	15.06
600.0	2.31	7.19	16.14	18.25	19.30	14.86
650.0	2.33	7.24	15.99	18.81	19.13	14.77
700.0	2.34	7.28	15.87	19.18	19.00	14.51
750.0	2.36	7.31	15.89	19.34	18.89	14.36
800.0	2.37	7.35	15.84	19.90	18.78	14.30
850.0	2.39	7.40	15.48	20.56	18.70	14.09
900.0	2.41	7.45	15.00	20.87	18.64	13.89
950.0	2.44	7.51	14.38	21.72	18.57	13.86
1000.0	2.46	7.58	13.62	22.94	18.52	13.64
1050.0	2.48	7.65	12.65	24.01	18.48	13.47
1100.0	2.51	7.74	11.89	25.27	18.42	13.46
1150.0	2.53	7.84	11.22	27.67	18.38	13.30
1200.0	2.55	7.96	10.30	30.41	18.36	13.18
1250.0	2.57	8.08	9.45	31.43	18.38	13.06
1300.0	2.61	8.21	8.79	32.83	18.46	12.76
1350.0	2.66	8.31	8.21	31.18	18.52	12.37
1400.0	2.69	8.39	7.69	28.69	18.65	11.92
1450.0	2.73	8.48	7.18	27.18	18.79	11.37
1500.0	2.81	8.59	6.83	25.19	18.99	10.78
1600.0	3.03	8.73	6.71	22.90	19.32	9.82
1700.0	3.32	8.93	6.47	21.60	19.37	8.85
1800.0	3.70	9.05	6.86	21.21	18.60	8.20
1900.0	4.04	9.32	6.36	21.60	16.98	7.86
2000.0	4.30	9.60	5.77	22.83	15.11	7.93
2100.0	4.48	10.06	4.48	24.85	13.34	8.34
2200.0	4.52	10.59	2.86	27.33	11.88	9.02
2300.0	4.68	10.98	1.65	27.84	11.05	9.48
2400.0	4.94	11.22	0.82	26.31	10.73	9.58
2500.0	5.58	11.16	0.79	23.69	10.77	9.20
2750.0	8.37	11.06	2.23	21.15	10.55	8.00
3000.0	11.26	12.46	0.26	18.87	9.20	8.09
3250.0	12.27	14.59	4.14	13.35	7.64	9.69
3500.0	14.52	16.08	6.34	10.50	7.34	10.29
3750.0	23.48	17.26	4.90	9.87	6.87	8.85
4000.0	43.80	20.61	7.07	10.43	5.68	7.56



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