

Directional Coupler

DBTC-13-4X+

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	0.64	12.86	21.35	22.95	32.07	24.98
10	0.63	12.86	21.35	23.14	33.32	25.22
15	0.63	12.86	21.35	23.34	34.56	25.45
20	0.63	12.86	21.35	23.45	35.21	25.59
25	0.64	12.87	21.36	23.47	35.26	25.61
50	0.65	12.89	21.32	23.60	35.40	25.77
75	0.66	12.91	21.24	23.73	35.47	25.90
100	0.66	12.92	21.15	23.83	35.53	26.02
150	0.67	12.94	20.93	23.98	35.52	26.18
200	0.68	12.95	20.63	24.12	35.30	26.29
250	0.68	12.97	20.32	24.25	34.80	26.34
300	0.69	12.98	19.91	24.30	34.50	26.36
350	0.69	12.99	19.47	24.39	34.40	26.30
400	0.70	13.00	18.99	24.49	34.19	26.22
450	0.71	13.01	18.51	24.60	33.67	26.08
475	0.71	13.01	18.26	24.63	33.40	26.00
500	0.72	13.01	18.03	24.70	33.24	25.90
525	0.72	13.01	17.77	24.75	33.35	25.79
550	0.73	13.02	17.51	24.80	33.34	25.66
600	0.74	13.02	16.99	24.92	33.19	25.39
650	0.75	13.03	16.48	25.05	32.85	25.09
700	0.76	13.04	16.00	25.27	32.60	24.73
750	0.78	13.04	15.54	25.37	32.66	24.32
800	0.80	13.04	15.08	25.62	32.68	23.86
850	0.81	13.04	14.63	25.87	32.68	23.38
900	0.83	13.04	14.24	26.10	32.66	22.86
950	0.85	13.04	13.86	26.42	32.74	22.32
975	0.86	13.04	13.69	26.46	32.88	22.05
1000	0.88	13.03	13.51	26.57	33.01	21.77
1100	0.93	13.02	12.85	27.22	32.97	20.64
1200	0.99	13.01	12.30	27.71	33.07	19.52
1300	1.07	12.98	11.84	28.14	32.81	18.44
1400	1.15	12.97	11.47	28.07	32.45	17.43
1500	1.26	12.96	11.17	27.44	31.78	16.50
1600	1.37	12.96	10.97	26.42	31.35	15.64
1700	1.51	12.98	10.85	25.07	31.00	14.88
1800	1.67	13.02	10.81	23.54	30.72	14.22
1900	1.86	13.10	10.80	22.22	31.13	13.64
2000	2.06	13.22	10.79	20.83	31.16	13.15
2100	2.29	13.39	10.70	19.64	31.90	12.73
2200	2.53	13.61	10.42	18.51	31.91	12.39
2300	2.78	13.89	9.92	17.58	31.22	12.11
2400	3.02	14.22	9.13	16.80	29.54	11.89
2500	3.25	14.62	8.13	16.11	27.77	11.70
2600	3.47	15.06	7.00	15.58	26.02	11.53
2700	3.67	15.54	5.86	15.14	24.54	11.33
2800	3.85	16.06	4.73	14.80	23.35	11.12
2900	4.01	16.63	3.67	14.53	22.13	10.86
3000	4.14	17.24	2.67	14.36	21.50	10.57
3500	4.74	20.58	0.92	13.71	19.27	8.62
4000	5.47	22.34	0.55	12.99	20.84	6.79
4500	6.73	20.45	4.43	11.55	28.26	5.56
5000	8.85	17.90	5.02	9.53	21.40	4.91



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IF/RF MICROWAVE COMPONENTS

Directional Coupler

DBTC-13-4X+

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	0.75	12.92	20.63	20.41	24.47	22.03
10	0.67	12.86	20.64	21.76	28.08	23.48
15	0.60	12.80	20.64	23.11	31.70	24.93
20	0.56	12.78	20.67	23.85	34.29	25.81
25	0.56	12.78	20.70	24.01	35.85	26.12
50	0.55	12.78	20.79	24.37	39.85	27.16
75	0.55	12.79	20.83	24.71	38.95	27.39
100	0.56	12.80	20.82	25.20	37.77	27.11
150	0.56	12.81	20.69	25.50	38.42	27.05
200	0.57	12.81	20.41	25.19	36.29	27.30
250	0.58	12.82	20.08	25.28	34.99	26.86
300	0.58	12.82	19.68	25.01	34.38	26.92
350	0.59	12.82	19.28	25.05	33.89	26.62
400	0.59	12.82	18.86	25.06	33.56	26.39
450	0.60	12.82	18.44	25.02	32.40	26.17
475	0.61	12.82	18.23	25.03	32.00	25.98
500	0.61	12.82	18.02	25.04	31.73	25.82
525	0.61	12.81	17.80	25.03	31.60	25.69
550	0.62	12.81	17.56	25.03	31.42	25.52
600	0.62	12.81	17.06	25.10	31.32	25.08
650	0.63	12.80	16.57	25.03	30.81	24.81
700	0.65	12.80	16.12	24.99	30.17	24.46
750	0.66	12.78	15.68	24.97	29.98	24.02
800	0.67	12.77	15.24	25.23	30.13	23.56
850	0.69	12.77	14.81	25.30	29.90	23.00
900	0.71	12.76	14.41	25.22	29.37	22.47
950	0.73	12.74	14.01	25.39	29.33	21.91
975	0.73	12.74	13.83	25.40	29.42	21.61
1000	0.75	12.73	13.65	25.45	29.46	21.32
1100	0.79	12.70	12.97	26.21	29.84	20.28
1200	0.85	12.68	12.44	26.96	30.38	19.24
1300	0.91	12.65	11.94	27.03	29.74	18.18
1400	0.99	12.61	11.52	27.92	31.13	17.33
1500	1.10	12.60	11.17	27.14	29.77	16.39
1600	1.21	12.59	10.94	26.79	30.36	15.63
1700	1.35	12.58	10.85	26.12	31.90	14.91
1800	1.51	12.63	10.84	24.29	31.11	14.14
1900	1.71	12.69	10.90	22.73	31.45	13.58
2000	1.92	12.81	10.97	21.44	32.76	13.04
2100	2.16	12.97	10.97	20.21	34.21	12.75
2200	2.42	13.20	10.72	18.93	32.62	12.36
2300	2.69	13.51	10.13	17.82	28.57	12.13
2400	2.95	13.87	9.26	16.92	28.38	11.91
2500	3.19	14.31	8.11	16.29	24.81	11.92
2600	3.40	14.77	6.77	15.67	23.44	11.78
2700	3.58	15.31	5.44	15.11	21.93	11.71
2800	3.73	15.91	4.18	14.74	20.99	11.57
2900	3.85	16.55	3.03	14.68	20.32	11.22
3000	3.94	17.18	1.99	14.69	20.19	10.97
3500	4.31	21.05	1.75	14.25	18.18	8.68
4000	4.89	22.58	0.42	13.74	19.33	6.64
4500	6.12	20.23	4.72	11.92	23.71	5.14
5000	8.20	17.55	3.75	9.63	24.19	4.56



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IF/RF MICROWAVE COMPONENTS

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		
				IN	OUT	CPL
5	0.80	12.98	21.65	21.17	27.76	23.59
10	0.79	12.98	21.65	21.38	28.38	23.80
15	0.79	12.98	21.66	21.60	28.99	24.02
20	0.79	12.99	21.65	21.74	29.27	24.12
25	0.79	12.99	21.64	21.80	29.22	24.11
50	0.81	13.02	21.54	22.06	29.04	24.04
75	0.82	13.04	21.42	22.16	29.34	24.15
100	0.82	13.06	21.26	22.09	30.09	24.49
150	0.83	13.10	20.92	22.13	30.78	24.96
200	0.83	13.13	20.57	22.47	30.96	24.97
250	0.83	13.15	20.20	22.65	31.63	25.34
300	0.84	13.19	19.77	22.82	31.84	25.56
350	0.84	13.22	19.28	23.06	32.27	25.62
400	0.84	13.25	18.74	23.24	32.71	25.82
450	0.85	13.29	18.19	23.47	32.84	25.90
475	0.86	13.31	17.92	23.56	32.92	25.92
500	0.86	13.32	17.64	23.66	33.09	25.93
525	0.87	13.34	17.35	23.76	33.50	25.97
550	0.87	13.36	17.08	23.85	33.76	25.96
600	0.88	13.39	16.51	24.09	34.40	25.85
650	0.89	13.43	15.98	24.36	34.86	25.65
700	0.91	13.46	15.50	24.72	35.29	25.35
750	0.92	13.49	15.03	24.93	36.29	24.92
800	0.94	13.51	14.56	25.22	36.99	24.44
850	0.96	13.54	14.11	25.54	37.80	23.90
900	0.98	13.56	13.73	25.85	38.52	23.32
950	1.00	13.58	13.36	26.18	39.04	22.72
975	1.01	13.58	13.21	26.21	39.20	22.41
1000	1.03	13.59	13.04	26.29	39.29	22.10
1100	1.08	13.61	12.42	27.04	39.88	20.84
1200	1.15	13.63	11.90	27.36	38.70	19.64
1300	1.22	13.64	11.45	27.64	37.08	18.52
1400	1.31	13.66	11.04	27.19	34.72	17.50
1500	1.41	13.68	10.68	26.54	33.00	16.55
1600	1.51	13.72	10.41	25.76	31.68	15.66
1700	1.64	13.78	10.17	24.58	30.13	14.84
1800	1.77	13.85	9.98	23.53	29.53	14.16
1900	1.93	13.95	9.77	22.52	29.30	13.62
2000	2.09	14.09	9.55	21.19	28.03	13.08
2100	2.27	14.27	9.33	20.15	27.93	12.52
2200	2.45	14.47	9.09	19.13	27.16	12.07
2300	2.65	14.70	8.82	18.38	27.12	11.66
2400	2.85	14.98	8.41	17.58	26.54	11.27
2500	3.05	15.30	7.97	16.76	26.15	10.88
2600	3.26	15.62	7.50	16.21	26.01	10.56
2700	3.47	15.97	6.96	15.77	26.21	10.24
2800	3.68	16.35	6.32	15.27	25.33	9.94
2900	3.89	16.75	5.64	14.79	24.98	9.70
3000	4.10	17.19	4.95	14.31	25.12	9.41
3500	5.12	19.42	1.51	13.02	24.54	8.14
4000	6.12	21.08	0.71	12.11	26.55	7.00
4500	7.15	20.29	0.54	11.39	34.00	6.20
5000	8.45	17.86	4.31	10.14	24.05	5.43



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