

Directional Coupler

DBTC-9-4-75X+

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	1.29	8.94	20.51	17.98	29.08	18.19
10.0	1.26	8.93	20.67	18.37	35.96	18.54
25.0	1.26	8.94	20.67	18.52	46.16	18.62
50.0	1.28	8.96	20.57	18.47	36.57	18.41
75.0	1.29	8.98	20.51	18.38	32.33	18.11
100.0	1.30	8.99	20.47	18.22	29.49	17.70
150.0	1.32	9.02	20.42	17.72	25.68	16.68
200.0	1.33	9.05	20.29	17.08	23.07	15.51
250.0	1.35	9.08	20.12	16.36	21.10	14.38
300.0	1.37	9.11	20.01	15.65	19.61	13.37
350.0	1.40	9.15	19.91	15.00	18.39	12.48
400.0	1.42	9.19	19.79	14.43	17.41	11.66
425.0	1.43	9.20	19.71	14.16	16.99	11.29
450.0	1.45	9.23	19.62	13.93	16.60	10.96
475.0	1.46	9.24	19.72	13.73	16.28	10.66
500.0	1.49	9.28	19.47	13.52	15.95	10.39
525.0	1.49	9.28	19.79	13.35	15.68	10.13
550.0	1.52	9.31	19.48	13.18	15.43	9.88
600.0	1.55	9.34	19.62	12.92	15.00	9.43
650.0	1.58	9.38	19.69	12.73	14.66	9.07
700.0	1.61	9.40	19.94	12.60	14.40	8.77
750.0	1.63	9.40	20.46	12.52	14.20	8.50
800.0	1.65	9.39	21.22	12.51	14.08	8.26
850.0	1.67	9.38	22.01	12.51	13.97	8.07
900.0	1.69	9.36	22.86	12.56	13.91	7.90
950.0	1.70	9.34	23.53	12.63	13.88	7.73
975.0	1.70	9.33	24.42	12.64	13.85	7.64
1000.0	1.69	9.32	24.28	12.66	13.81	7.55
1025.0	1.69	9.29	24.97	12.71	13.81	7.48
1050.0	1.69	9.27	25.26	12.74	13.79	7.40
1075.0	1.68	9.26	24.98	12.80	13.78	7.33
1100.0	1.68	9.21	25.21	12.80	13.79	7.25
1150.0	1.67	9.20	23.85	12.83	13.73	7.07
1200.0	1.67	9.19	21.84	12.86	13.69	6.89
1250.0	1.68	9.22	19.70	12.84	13.60	6.72
1300.0	1.70	9.23	18.21	12.80	13.49	6.53
1350.0	1.74	9.26	16.75	12.70	13.34	6.34
1400.0	1.78	9.28	15.50	12.58	13.13	6.17
1450.0	1.84	9.29	14.85	12.42	12.90	6.00
1500.0	1.94	9.31	14.58	12.19	12.55	5.83
1550.0	2.07	9.36	14.31	11.91	12.18	5.69
1600.0	2.24	9.42	14.04	11.62	11.74	5.57
1650.0	2.42	9.44	13.89	11.31	11.28	5.47
1700.0	2.61	9.42	14.13	10.99	10.82	5.37
1750.0	2.86	9.36	14.89	10.69	10.30	5.30
1800.0	3.12	9.29	15.60	10.39	9.84	5.24
1900.0	3.45	9.12	16.10	9.84	8.92	5.14
2000.0	3.59	8.80	16.24	9.37	8.16	5.09
2100.0	3.64	8.67	14.19	8.94	7.27	5.07
2200.0	3.56	8.59	11.64	8.58	6.54	5.16
2300.0	3.52	8.73	9.50	8.48	5.94	5.31
2400.0	3.71	8.80	8.34	8.59	5.54	5.57
2500.0	4.69	8.85	8.41	8.87	5.31	5.87



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IF/RF MICROWAVE COMPONENTS

Directional Coupler

DBTC-9-4-75X+

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	1.34	8.95	19.73	16.81	21.76	16.76
10.0	1.18	8.85	20.29	18.64	26.88	18.56
25.0	1.10	8.80	20.55	20.15	35.62	19.97
50.0	1.10	8.81	20.61	21.03	34.56	20.64
75.0	1.11	8.82	20.53	20.89	30.85	20.36
100.0	1.11	8.84	20.49	19.89	28.27	19.21
150.0	1.13	8.86	20.48	18.90	25.18	17.40
200.0	1.15	8.89	20.41	18.39	23.35	16.43
250.0	1.17	8.92	20.28	16.87	21.77	14.64
300.0	1.20	8.95	20.22	16.09	20.35	13.55
350.0	1.22	8.98	20.15	15.09	18.93	12.46
400.0	1.25	9.02	20.11	14.30	17.64	11.50
425.0	1.26	9.04	20.04	13.92	17.07	11.08
450.0	1.28	9.07	19.97	13.56	16.54	10.69
475.0	1.28	9.07	20.13	13.28	16.09	10.33
500.0	1.31	9.11	19.87	13.04	15.66	10.04
525.0	1.32	9.11	20.26	12.81	15.31	9.78
550.0	1.34	9.15	19.95	12.54	14.98	9.48
600.0	1.37	9.17	20.19	12.29	14.46	8.99
650.0	1.40	9.20	20.34	12.18	14.06	8.71
700.0	1.42	9.22	20.70	12.09	13.75	8.41
750.0	1.44	9.21	21.45	12.31	13.55	8.29
800.0	1.46	9.19	22.48	12.42	13.45	8.15
850.0	1.46	9.16	23.69	12.70	13.45	8.10
900.0	1.47	9.12	25.00	13.12	13.56	8.09
950.0	1.47	9.09	26.11	13.49	13.76	8.00
975.0	1.47	9.06	27.52	13.56	13.87	7.95
1000.0	1.45	9.04	27.16	13.64	13.93	7.89
1025.0	1.45	9.01	28.05	13.83	14.09	7.83
1050.0	1.44	8.98	27.49	13.99	14.18	7.76
1075.0	1.42	8.95	27.00	14.09	14.32	7.71
1100.0	1.42	8.90	25.85	13.93	14.44	7.60
1150.0	1.40	8.86	23.75	13.51	14.57	7.29
1200.0	1.39	8.84	21.32	13.03	14.62	6.90
1250.0	1.38	8.86	19.12	12.45	14.53	6.46
1300.0	1.40	8.87	17.57	11.83	14.36	6.03
1350.0	1.42	8.90	16.10	11.17	14.05	5.63
1400.0	1.45	8.93	14.90	10.61	13.62	5.23
1450.0	1.50	8.95	14.27	10.24	13.10	4.91
1500.0	1.59	8.97	14.02	9.91	12.49	4.74
1550.0	1.72	9.04	13.92	9.65	11.85	4.61
1600.0	1.89	9.12	13.80	9.69	11.18	4.55
1650.0	2.08	9.15	13.78	9.75	10.56	4.61
1700.0	2.28	9.13	14.18	9.96	10.00	4.76
1750.0	2.56	9.07	15.15	10.52	9.49	4.99
1800.0	2.84	8.99	16.10	10.67	9.08	5.30
1900.0	3.16	8.78	16.88	11.66	8.36	5.78
2000.0	3.26	8.39	16.79	11.49	7.89	5.98
2100.0	3.26	8.16	14.13	10.16	7.31	5.67
2200.0	3.14	8.07	11.15	8.01	6.69	4.86
2300.0	3.07	8.19	8.95	6.40	6.14	4.07
2400.0	3.19	8.25	7.68	5.49	5.64	3.51
2500.0	4.22	8.34	7.94	5.46	5.14	3.32



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IF/RF MICROWAVE COMPONENTS

Directional Coupler

DBTC-9-4-75X+

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	1.47	9.06	20.24	17.09	27.13	17.41
10.0	1.45	9.06	20.36	17.38	30.63	17.69
25.0	1.45	9.07	20.32	17.30	32.73	17.58
50.0	1.47	9.09	20.21	16.84	31.78	16.98
75.0	1.48	9.11	20.15	16.74	30.09	16.67
100.0	1.49	9.12	20.15	17.06	28.38	16.72
150.0	1.50	9.14	20.08	17.11	25.37	16.45
200.0	1.51	9.17	19.90	16.27	22.88	15.09
250.0	1.53	9.20	19.80	16.20	21.00	14.39
300.0	1.55	9.23	19.65	15.61	19.64	13.60
350.0	1.57	9.26	19.53	15.04	18.55	12.69
400.0	1.59	9.29	19.40	14.80	17.76	12.07
425.0	1.60	9.31	19.31	14.59	17.42	11.73
450.0	1.62	9.34	19.20	14.37	17.12	11.40
475.0	1.62	9.35	19.28	14.20	16.87	11.10
500.0	1.65	9.38	18.99	14.07	16.61	10.86
525.0	1.66	9.38	19.32	13.99	16.41	10.64
550.0	1.68	9.42	19.00	13.84	16.20	10.40
600.0	1.71	9.46	19.06	13.52	15.84	9.90
650.0	1.74	9.49	19.10	13.34	15.53	9.51
700.0	1.76	9.52	19.25	13.14	15.23	9.19
750.0	1.78	9.53	19.73	12.96	14.96	8.84
800.0	1.81	9.54	20.37	12.86	14.74	8.48
850.0	1.82	9.53	21.01	12.71	14.53	8.20
900.0	1.84	9.53	21.72	12.68	14.35	7.97
950.0	1.86	9.53	22.21	12.71	14.19	7.77
975.0	1.87	9.52	22.90	12.63	14.08	7.64
1000.0	1.86	9.52	22.74	12.60	13.98	7.54
1025.0	1.86	9.50	23.27	12.63	13.94	7.45
1050.0	1.86	9.49	23.65	12.70	13.85	7.37
1075.0	1.86	9.50	23.33	12.84	13.81	7.33
1100.0	1.86	9.45	23.68	12.87	13.78	7.26
1150.0	1.87	9.44	22.77	13.00	13.69	7.15
1200.0	1.88	9.45	21.17	13.29	13.64	7.07
1250.0	1.89	9.47	19.23	13.52	13.59	6.96
1300.0	1.92	9.50	17.87	13.75	13.56	6.90
1350.0	1.97	9.52	16.50	13.91	13.52	6.85
1400.0	2.01	9.54	15.31	14.02	13.45	6.72
1450.0	2.08	9.56	14.68	13.99	13.36	6.59
1500.0	2.19	9.57	14.39	13.74	13.18	6.44
1550.0	2.32	9.61	14.08	13.38	12.94	6.26
1600.0	2.48	9.66	13.77	12.91	12.58	6.11
1650.0	2.66	9.68	13.61	12.26	12.15	5.92
1700.0	2.84	9.67	13.78	11.66	11.65	5.67
1750.0	3.07	9.60	14.43	11.07	11.07	5.49
1800.0	3.31	9.54	14.99	10.53	10.52	5.33
1900.0	3.62	9.41	15.38	9.62	9.36	5.05
2000.0	3.72	9.13	15.65	9.17	8.36	4.92
2100.0	3.77	9.05	13.88	8.98	7.46	4.99
2200.0	3.70	8.99	11.57	9.09	6.80	5.32
2300.0	3.65	9.15	9.47	9.53	6.26	5.75
2400.0	3.82	9.24	8.32	10.26	6.03	6.25
2500.0	4.75	9.28	8.23	10.79	5.92	6.67



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