

# Directional Coupler

# DBTC-7-152X+

## 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	2.08	6.85	36.06	13.19	22.11	25.94
20.0	2.09	6.86	35.81	13.24	22.17	26.44
50.0	2.11	6.88	34.64	13.31	22.11	26.58
100.0	2.12	6.90	31.88	13.44	21.79	26.08
150.0	2.13	6.90	29.32	13.59	21.47	25.61
200.0	2.12	6.90	27.12	13.75	21.21	25.18
250.0	2.12	6.90	25.31	13.91	20.95	24.81
300.0	2.12	6.89	23.74	14.10	20.70	24.53
350.0	2.12	6.88	22.45	14.27	20.53	24.29
400.0	2.11	6.86	21.30	14.47	20.37	24.08
450.0	2.11	6.85	20.25	14.69	20.22	23.96
500.0	2.11	6.84	19.36	14.93	20.06	23.89
550.0	2.11	6.82	18.53	15.17	19.94	23.85
600.0	2.11	6.81	17.78	15.44	19.84	23.77
650.0	2.12	6.79	17.12	15.74	19.72	23.72
700.0	2.12	6.78	16.47	16.02	19.66	23.69
750.0	2.12	6.77	15.89	16.32	19.63	23.62
800.0	2.14	6.76	15.36	16.62	19.59	23.45
850.0	2.15	6.74	14.88	16.92	19.53	23.23
900.0	2.17	6.74	14.41	17.20	19.53	22.97
950.0	2.19	6.73	13.98	17.48	19.52	22.61
1000.0	2.21	6.72	13.59	17.71	19.53	22.15
1050.0	2.24	6.71	13.22	17.90	19.56	21.63
1100.0	2.27	6.71	12.86	18.04	19.58	21.05
1150.0	2.31	6.71	12.55	18.08	19.54	20.42
1200.0	2.35	6.72	12.24	18.09	19.48	19.76
1250.0	2.40	6.72	11.94	18.00	19.43	19.11
1300.0	2.45	6.73	11.66	17.83	19.31	18.45
1350.0	2.51	6.74	11.38	17.58	19.15	17.80
1400.0	2.57	6.76	11.13	17.32	18.93	17.19
1450.0	2.63	6.78	10.88	16.97	18.72	16.60
1500.0	2.71	6.80	10.63	16.58	18.50	16.03
1550.0	2.79	6.83	10.39	16.17	18.20	15.49
1600.0	2.87	6.85	10.16	15.76	17.82	14.99
1700.0	3.07	6.93	9.71	14.89	17.04	14.04
1800.0	3.28	7.01	9.28	14.03	16.23	13.21
1900.0	3.53	7.11	8.85	13.22	15.31	12.46
2000.0	3.79	7.22	8.46	12.45	14.45	11.82
2100.0	4.08	7.36	8.08	11.78	13.58	11.24
2200.0	4.39	7.50	7.71	11.14	12.73	10.74
2300.0	4.71	7.67	7.33	10.57	12.03	10.29
2400.0	5.02	7.86	6.94	10.08	11.39	9.90
2500.0	5.33	8.07	6.55	9.69	10.83	9.54
2750.0	5.97	8.74	5.44	8.91	9.91	8.86
3000.0	6.39	9.70	4.02	8.43	9.87	8.46
3250.0	6.74	11.11	2.10	8.02	10.99	8.29
3500.0	7.38	13.24	0.46	7.44	14.30	8.25
3750.0	8.74	15.99	3.28	6.78	18.16	7.91
4000.0	10.92	18.01	4.96	6.23	13.74	7.23
4250.0	13.56	18.20	4.56	5.86	9.98	6.39
4500.0	16.17	17.67	3.41	5.62	7.93	5.67
4750.0	18.21	17.16	2.34	5.39	6.78	5.20
5000.0	19.47	16.94	1.66	5.17	6.16	4.85



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# Directional Coupler

# DBTC-7-152X+

## 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	2.09	6.85	33.06	12.83	20.48	20.13
20.0	2.00	6.70	38.20	13.43	20.58	21.81
50.0	1.96	6.62	39.16	13.80	20.24	22.32
100.0	1.96	6.62	33.47	14.09	20.15	22.35
150.0	1.96	6.62	30.28	14.30	20.24	22.54
200.0	1.97	6.62	27.94	14.32	19.92	22.32
250.0	1.97	6.63	25.99	14.47	19.89	22.54
300.0	1.98	6.63	24.26	14.57	19.79	22.49
350.0	1.98	6.62	22.86	14.68	19.65	22.54
400.0	1.98	6.61	21.64	14.87	19.63	22.64
450.0	1.98	6.60	20.59	15.06	19.53	22.63
500.0	1.98	6.59	19.69	15.29	19.46	22.83
550.0	1.98	6.58	18.85	15.48	19.35	22.92
600.0	1.98	6.56	18.08	15.73	19.25	23.04
650.0	1.98	6.54	17.40	16.06	19.29	23.15
700.0	1.98	6.53	16.75	16.33	19.29	23.27
750.0	1.99	6.51	16.17	16.63	19.24	23.47
800.0	2.00	6.49	15.65	16.92	19.20	23.53
850.0	2.01	6.48	15.15	17.24	19.12	23.67
900.0	2.03	6.46	14.66	17.54	19.14	23.65
950.0	2.04	6.44	14.21	17.87	19.19	23.52
1000.0	2.06	6.43	13.80	18.17	19.30	23.16
1050.0	2.08	6.42	13.41	18.35	19.34	22.55
1100.0	2.10	6.41	13.03	18.53	19.33	22.01
1150.0	2.14	6.40	12.69	18.58	19.35	21.28
1200.0	2.17	6.40	12.34	18.58	19.25	20.45
1250.0	2.21	6.39	12.02	18.61	19.21	19.70
1300.0	2.25	6.39	11.73	18.42	19.31	18.92
1350.0	2.30	6.39	11.45	18.11	19.08	18.15
1400.0	2.36	6.39	11.20	17.96	18.57	17.49
1450.0	2.42	6.40	10.95	17.75	18.12	16.87
1500.0	2.48	6.41	10.68	17.37	17.95	16.22
1550.0	2.55	6.43	10.41	16.71	18.02	15.58
1600.0	2.63	6.45	10.15	16.19	17.62	14.99
1700.0	2.81	6.49	9.68	15.29	16.64	13.92
1800.0	3.02	6.55	9.22	14.32	15.71	12.92
1900.0	3.26	6.62	8.80	13.41	14.83	12.13
2000.0	3.53	6.71	8.42	12.63	13.73	11.37
2100.0	3.81	6.82	8.02	11.82	12.95	10.73
2200.0	4.16	6.91	7.70	11.27	11.56	10.19
2300.0	4.46	7.08	7.28	10.48	11.23	9.67
2400.0	4.80	7.24	6.98	10.05	10.32	9.19
2500.0	5.11	7.42	6.63	9.67	9.73	8.88
2750.0	5.75	8.09	5.55	8.79	8.91	8.05
3000.0	6.13	9.10	4.10	8.15	8.83	7.50
3250.0	6.36	10.61	2.08	7.75	10.14	7.34
3500.0	6.93	13.05	0.77	7.13	13.40	7.26
3750.0	8.42	16.56	4.36	6.16	15.96	6.97
4000.0	10.82	19.16	6.52	5.59	11.66	6.37
4250.0	13.73	19.08	5.71	5.28	8.58	5.55
4500.0	16.38	18.23	4.12	5.12	7.07	4.89
4750.0	18.24	17.48	2.84	5.00	6.20	4.67
5000.0	19.19	17.20	2.01	4.82	5.79	4.31



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# Directional Coupler

# DBTC-7-152X+

## 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	2.34	7.22	31.92	12.29	25.59	31.28
20.0	2.35	7.22	31.92	12.37	25.72	33.68
50.0	2.37	7.24	31.64	12.50	25.64	34.54
100.0	2.37	7.26	30.20	12.62	24.85	32.74
150.0	2.37	7.26	28.25	12.74	23.65	30.05
200.0	2.35	7.25	26.27	12.98	23.08	28.94
250.0	2.33	7.24	24.56	13.18	22.59	27.97
300.0	2.32	7.23	23.08	13.39	21.97	27.09
350.0	2.31	7.22	21.86	13.62	21.61	26.62
400.0	2.30	7.21	20.76	13.87	21.30	26.07
450.0	2.29	7.20	19.80	14.13	20.92	25.65
500.0	2.28	7.19	18.97	14.41	20.57	25.37
550.0	2.27	7.18	18.22	14.69	20.31	25.08
600.0	2.26	7.17	17.54	15.01	20.08	24.79
650.0	2.26	7.16	16.95	15.35	19.86	24.57
700.0	2.26	7.15	16.39	15.68	19.71	24.32
750.0	2.26	7.14	15.89	16.02	19.62	24.04
800.0	2.27	7.14	15.45	16.36	19.58	23.68
850.0	2.28	7.14	15.03	16.67	19.49	23.27
900.0	2.30	7.14	14.63	16.95	19.43	22.86
950.0	2.32	7.14	14.26	17.22	19.39	22.40
1000.0	2.35	7.15	13.92	17.46	19.40	21.87
1050.0	2.38	7.15	13.61	17.66	19.45	21.32
1100.0	2.42	7.17	13.29	17.80	19.41	20.77
1150.0	2.46	7.18	13.02	17.89	19.36	20.19
1200.0	2.50	7.20	12.75	17.91	19.40	19.62
1250.0	2.55	7.21	12.48	17.82	19.35	19.04
1300.0	2.61	7.23	12.23	17.69	19.19	18.46
1350.0	2.66	7.25	11.97	17.53	19.11	17.93
1400.0	2.72	7.29	11.73	17.29	19.06	17.39
1450.0	2.79	7.32	11.50	16.95	18.92	16.87
1500.0	2.86	7.36	11.26	16.63	18.71	16.38
1550.0	2.94	7.39	11.03	16.27	18.47	15.90
1600.0	3.03	7.43	10.79	15.89	18.24	15.44
1700.0	3.20	7.54	10.33	15.06	17.77	14.51
1800.0	3.40	7.64	9.91	14.36	16.99	13.81
1900.0	3.62	7.76	9.49	13.68	16.24	13.20
2000.0	3.84	7.89	9.07	12.97	15.60	12.62
2100.0	4.09	8.04	8.68	12.36	14.88	12.01
2200.0	4.34	8.20	8.26	11.76	14.29	11.56
2300.0	4.60	8.36	7.85	11.23	13.50	11.13
2400.0	4.86	8.54	7.42	10.77	12.92	10.75
2500.0	5.11	8.73	6.99	10.36	12.46	10.37
2750.0	5.71	9.29	5.79	9.47	11.44	9.67
3000.0	6.18	9.98	4.47	8.98	11.02	9.30
3250.0	6.61	10.97	2.73	8.42	11.57	9.11
3500.0	7.16	12.43	0.56	7.75	14.09	9.16
3750.0	8.16	14.34	1.78	7.10	20.45	8.99
4000.0	9.89	16.06	3.53	6.39	18.29	8.27
4250.0	12.28	16.52	3.62	5.81	11.76	7.22
4500.0	15.10	16.22	2.80	5.40	8.53	6.27
4750.0	18.01	15.94	1.97	5.04	6.79	5.47
5000.0	20.48	15.84	1.40	4.75	5.80	4.92



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