Bi-Directional Coupler BDCA-15-25+

Typical Performance Data

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

FREQ. (MHz)	INSERTION LOSS (dB)		COUPLING (dB)		DIRECTIVITY (dB)		RETURN LOSS (dB)			
	IN-OUT	FWD-REV	IN-FWD	OUT-REV	IN-REV	OUT-FWD	IN	OUT	FWD	REV
500	0.21	0.21	20.94	20.95	30.43	30.58	38.69	39.65	33.87	33.96
600	0.24	0.24	19.51	19.52	31.28	31.49	39.85	39.94	33.39	32.98
700	0.27	0.27	18.35	18.36	32.09	32.05	39.61	40.63	32.80	32.75
790	0.30	0.30	17.48	17.49	32.75	32.63	39.82	39.71	32.59	32.18
800	0.30	0.31	17.39	17.40	33.01	32.85	39.71	39.54	32.40	32.05
900	0.33	0.34	16.59	16.59	32.90	32.77	37.86	37.99	31.36	31.13
1000	0.36	0.37	15.90	15.91	32.03	31.65	35.28	35.42	30.10	29.81
1100	0.39	0.40	15.34	15.34	30.42	29.81	32.96	33.10	28.64	28.58
1200	0.42	0.43	14.86	14.86	28.55	27.77	30.30	30.55	27.38	27.39
1250	0.44	0.45	14.65	14.65	27.71	26.95	29.32	29.51	26.80	26.91
1300	0.45	0.47	14.46	14.46	26.51	25.94	28.21	28.33	25.87	25.97
1350	0.47	0.48	14.29	14.30	25.53	25.02	27.20	27.31	25.23	25.24
1400	0.48	0.49	14.14	14.15	24.79	24.10	26.11	26.25	24.67	24.67
1500	0.52	0.53	13.88	13.89	23.09	22.68	24.28	24.41	23.32	23.40
1600	0.55	0.56	13.69	13.69	21.80	21.39	22.70	22.75	22.33	22.30
1700	0.58	0.58	13.55	13.55	20.35	20.10	21.29	21.29	21.13	21.14
1800	0.60	0.61	13.46	13.46	19.38	19.03	20.13	20.12	20.31	20.30
1850	0.61	0.62	13.43	13.44	18.84	18.57	19.60	19.58	19.86	19.95
1900	0.63	0.63	13.42	13.42	18.41	18.10	19.11	19.14	19.56	19.59
1950	0.64	0.64	13.41	13.41	18.04	17.70	18.76	18.74	19.42	19.43
2000	0.66	0.65	13.41	13.41	17.64	17.34	18.41	18.39	19.21	19.31
2050	0.67	0.66	13.43	13.43	17.23	16.93	18.08	18.07	18.91	19.06
2100	0.67	0.67	13.44	13.44	16.88	16.61	17.81	17.79	18.86	18.91
2150	0.69	0.68	13.48	13.48	16.61	16.22	17.60	17.61	18.85	18.86
2200	0.69	0.68	13.52	13.52	16.26	15.96	17.48	17.45	18.74	18.81
2250	0.70	0.68	13.57	13.56	15.89	15.64	17.37	17.31	18.72	18.81
2300	0.70	0.69	13.62	13.62	15.63	15.38	17.28	17.26	18.91	18.94
2350	0.70	0.68	13.68	13.68	15.36	15.14	17.27	17.24	19.20	19.22
2400	0.71	0.68	13.75	13.74	15.13	14.95	17.30	17.25	19.37	19.49
2450	0.70	0.68	13.82	13.83	14.86	14.74	17.43	17.34	19.72	19.75
2500	0.71	0.68	13.93	13.90	14.62	14.40	17.56	17.45	20.15	20.17
2550	0.71	0.68	14.06	14.03	14.21	14.03	17.77	17.75	20.74	20.78
2600	0.69	0.67	14.16	14.15	14.02	13.94	18.15	18.01	21.23	21.40
2700	0.69	0.67	14.39	14.39	13.79	13.59	18.92	18.80	23.27	23.31
2800	0.67	0.66	14.74	14.72	13.36	13.25	20.11	20.08	25.86	26.41
2900	0.66	0.65	15.13	15.09	13.13	13.07	21.81	21.79	31.08	32.60
3000	0.64	0.64	15.54	15.50	13.28	12.97	23.92	24.20	35.85	47.23
3250	0.61	0.66	17.10	17.02	12.89	12.53	32.00	40.45	23.74	24.11
3500	0.61	0.71	19.52	19.41	11.90	11.47	26.53	27.12	18.37	18.50
3750	0.65	0.76	23.06	22.99	10.00	9.33	23.38	23.04	16.78	16.74
4000	0.66	0.76	29.65	29.48	3.18	2.63	24.28	23.80	17.22	17.30
4250	0.64	0.71	46.04	43.97	13.03	14.86	31.93	29.96	19.92	20.02
4500	0.67	0.71	28.06	28.02	0.85	1.05	31.70	29.48	28.16	28.57
4750	0.76	0.77	22.82	22.72	4.60	4.49	22.06	21.81	29.01	29.10
5000	0.84	0.84	20.17	20.32	6.50	6.33	18.59	18.52	21.00	20.51
5250	0.91	0.96	18.65	18.81	7.80	7.81	17.49	17.44	17.20	17.16
5500	0.94	1.03	17.76	17.98	8.48	8.61	17.90	17.80	15.81	15.63
5750	0.95	1.09	17.16	17.37	9.59	9.55	19.75	19.71	15.35	15.23
6000	0.96	1.12	16.82	16.97	10.78	10.71	23.69	24.04	15.63	15.52
6500	1.02	1.11	16.75	16.91	12.96	12.29	28.05	30.41	17.85	17.28
7000	1.15	1.16	16.85	16.77	16.13	14.11	18.52	18.97	22.17	21.88
7500	1.37	1.31	16.46	16.38	14.54	15.78	14.83	14.39	24.96	30.62
8000	1.73	1.98	15.08	15.03	5.97	7.46	12.36	11.85	12.23	13.04

Bi-Directional Coupler BDCA-15-25+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = -55°C

FREQ. (MHz)	INSERTION LOSS (dB)		COUPLING (dB)		DIRECTIVITY (dB)		RETURN LOSS (dB)			
	IN-OUT	FWD-REV	IN-FWD	OUT-REV	IN-REV	OUT-FWD	IN	OUT	FWD	REV
500	0.14	0.14	20.94	20.90	29.65	29.63	36.00	36.34	31.06	31.18
600	0.16	0.17	19.50	19.46	30.12	29.89	36.40	36.38	30.39	30.31
700	0.18	0.19	18.33	18.29	30.52	30.27	35.90	35.66	30.26	30.15
790	0.21	0.21	17.46	17.41	30.76	30.56	35.73	34.99	30.55	30.33
800	0.21	0.21	17.37	17.31	30.79	30.73	35.54	34.82	30.51	30.32
900	0.23	0.24	16.55	16.50	30.73	30.70	34.39	34.66	29.43	29.21
1000	0.25	0.26	15.86	15.80	30.16	30.36	32.59	32.80	29.20	29.01
1100	0.28	0.29	15.28	15.22	29.26	29.02	31.39	31.73	27.76	27.62
1200	0.30	0.31	14.79	14.73	28.30	27.55	29.53	29.83	27.13	27.11
1250	0.32	0.32	14.58	14.51	27.81	26.67	29.11	29.35	26.33	26.35
1300	0.32	0.33	14.39	14.31	26.84	26.21	28.42	28.63	25.72	25.75
1350	0.34	0.35	14.21	14.14	26.00	25.56	27.78	27.92	25.26	25.22
1400	0.34	0.36	14.06	13.98	25.32	24.18	26.66	26.74	24.42	24.30
1500	0.37	0.38	13.79	13.71	23.65	22.68	24.22	24.43	23.55	23.51
1600	0.40	0.41	13.59	13.51	21.95	21.32	22.68	22.63	22.28	22.12
1700	0.42	0.42	13.44	13.35	20.45	20.44	21.48	21.40	21.39	21.33
1800	0.44	0.44	13.33	13.24	19.82	19.46	20.39	20.31	21.10	21.02
1850	0.45	0.45	13.30	13.21	19.38	19.22	19.93	19.84	20.80	20.90
1900	0.46	0.47	13.29	13.19	18.86	18.26	19.36	19.35	19.82	19.71
1950	0.47	0.48	13.28	13.18	18.43	17.55	19.08	18.99	19.25	19.11
2000	0.48	0.48	13.28	13.17	17.95	17.47	18.79	18.59	19.24	19.31
2050	0.49	0.49	13.29	13.19	17.39	17.00	18.23	18.05	18.83	18.91
2100	0.50	0.49	13.31	13.20	16.95	16.37	17.69	17.57	18.65	18.58
2150	0.51	0.49	13.32	13.22	16.72	16.01	17.46	17.36	18.93	18.86
2200	0.51	0.49	13.36	13.25	16.49	16.12	17.52	17.34	19.27	19.36
2250	0.51	0.49	13.41	13.29	16.13	15.94	17.46	17.28	19.00	19.02
2300	0.51	0.50	13.47	13.35	15.88	15.23	17.34	17.22	18.41	18.22
2350	0.51	0.49	13.52	13.40	15.56	14.82	17.25	17.10	18.73	18.58
2400	0.52	0.49	13.58	13.46	15.25	14.79	17.17	16.96	19.06	19.11
2450	0.51	0.49	13.65	13.53	14.84	14.24	17.20	16.98	18.97	18.82
2500	0.51	0.48	13.74	13.60	14.58	13.87	17.41	17.16	19.85	19.72
2550	0.51	0.47	13.83	13.70	14.21	13.97	17.91	17.69	21.19	21.26
2600	0.48	0.46	13.94	13.81	14.07	14.14	18.68	18.29	21.48	21.62
2700	0.48	0.46	14.18	14.05	13.82	13.76	18.96	18.69	22.90	22.75
2800	0.45	0.44	14.49	14.35	13.49	13.19	20.19	19.93	26.51	26.70
2900	0.44	0.42	14.88	14.71	13.34	13.25	21.63	21.56	30.36	31.17
3000	0.42	0.41	15.27	15.10	13.53	12.97	23.23	23.23	39.28	41.97
3250	0.38	0.42	16.76	16.57	12.83	12.52	32.90	42.25	23.63	23.80
3500	0.37	0.45	19.08	18.84	12.42	12.09	27.26	27.78	17.91	18.02
3750	0.38	0.47	22.45	22.30	10.57	9.94	24.30	24.00	16.75	16.49
4000	0.37	0.44	28.37	28.12	4.21	3.65	23.66	23.27	17.96	17.87
4250	0.35	0.40	48.05	46.67	15.76	17.00	28.11	26.74	19.66	19.72
4500	0.36	0.38	28.97	28.49	0.39	0.29	33.02	29.60	26.70	27.19
4750	0.43	0.42	23.10	22.72	4.61	4.20	23.30	23.04	31.19	36.80
5000	0.49	0.48	20.21	20.12	6.51	5.96	19.02	18.69	22.73	21.37
5250	0.55	0.57	18.48	18.47	7.89	7.39	17.47	17.19	18.08	17.31
5500	0.57	0.65	17.50	17.54	8.71	7.84	18.04	17.64	15.60	14.85
5750	0.60	0.71	16.88	16.98	9.39	8.82	18.46	18.11	14.30	13.92
6000	0.59	0.74	16.59	16.53	10.56	10.19	21.71	21.90	14.33	14.13
6500	0.59	0.67	16.48	16.37	12.10	12.82	29.73	34.32	17.77	17.51
7000	0.69	0.67	16.49	16.18	16.61	12.79	18.45	18.82	23.47	22.51
7500	0.87	0.80	16.18	15.89	15.43	16.76	15.52	14.63	21.90	26.44
8000	1.21	1.25	14.77	14.43	7.07	8.49	12.26	11.81	14.20	14.90

Bi-Directional Coupler BDCA-15-25+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +100°C

FREQ. (MHz)	INSERTION LOSS (dB)		COUPLING (dB)		DIRECTIVITY (dB)		RETURN LOSS (dB)			
	IN-OUT	FWD-REV	IN-FWD	OUT-REV	IN-REV	OUT-FWD	IN	OUT	FWD	REV
500	0.25	0.25	20.91	20.93	29.46	29.76	39.34	40.69	36.15	35.83
600	0.28	0.29	19.49	19.51	30.94	30.93	40.86	41.39	35.44	34.90
700	0.32	0.33	18.33	18.36	31.90	31.95	41.75	42.67	34.77	34.52
790	0.36	0.36	17.47	17.50	33.34	32.83	43.91	42.61	34.02	33.50
800	0.36	0.36	17.38	17.41	33.68	33.00	43.80	42.34	33.77	33.36
900	0.39	0.40	16.58	16.61	33.83	33.70	40.85	40.26	32.17	31.85
1000	0.43	0.44	15.91	15.94	32.67	32.17	36.56	36.54	30.40	30.15
1100	0.47	0.48	15.34	15.38	30.51	29.94	33.30	33.38	28.62	28.54
1200	0.50	0.52	14.87	14.91	28.52	27.65	30.28	30.50	27.18	27.24
1250	0.52	0.54	14.67	14.71	27.53	26.82	29.19	29.34	26.55	26.73
1300	0.54	0.56	14.48	14.52	26.28	25.90	27.86	28.02	25.68	25.87
1350	0.55	0.57	14.32	14.37	25.29	24.99	26.76	26.92	25.04	25.14
1400	0.57	0.59	14.17	14.21	24.59	24.11	25.84	26.02	24.48	24.56
1500	0.60	0.62	13.92	13.97	23.06	22.92	24.35	24.56	23.22	23.36
1600	0.64	0.66	13.73	13.78	22.01	21.65	22.95	23.13	22.44	22.46
1700	0.67	0.69	13.60	13.65	20.69	20.37	21.54	21.71	21.36	21.40
1800	0.70	0.72	13.52	13.57	19.67	19.31	20.47	20.56	20.64	20.69
1850	0.72	0.73	13.49	13.54	19.14	18.94	20.01	20.10	20.32	20.49
1900	0.73	0.74	13.48	13.53	18.76	18.58	19.56	19.70	20.30	20.41
1950	0.74	0.75	13.47	13.52	18.44	18.33	19.25	19.35	20.39	20.49
2000	0.75	0.76	13.47	13.52	18.09	17.98	19.00	19.09	20.23	20.41
2050	0.77	0.77	13.49	13.54	17.75	17.57	18.80	18.91	20.00	20.23
2100	0.77	0.78	13.51	13.56	17.48	17.33	18.63	18.73	20.03	20.16
2150	0.79	0.79	13.55	13.60	17.22	16.95	18.49	18.63	20.05	20.07
2200	0.79	0.80	13.60	13.65	16.85	16.68	18.42	18.49	19.90	20.00
2250	0.80	0.80	13.65	13.70	16.55	16.29	18.26	18.32	20.06	20.14
2300	0.81	0.80	13.70	13.76	16.30	16.06	18.08	18.20	20.63	20.72
2350	0.81	0.80	13.77	13.84	16.01	15.92	18.10	18.24	21.21	21.36
2400	0.81	0.81	13.85	13.90	15.83	15.82	18.29	18.35	21.35	21.62
2450	0.82	0.81	13.94	13.99	15.61	15.70	18.55	18.57	21.91	22.17
2500	0.82	0.81	14.06	14.09	15.42	15.46	18.68	18.72	22.34	22.49
2550	0.82	0.82	14.19	14.22	15.20	14.96	18.81	18.94	22.55	22.52
2600	0.82	0.81	14.33	14.38	14.90	14.47	19.11	19.14	23.20	23.37
2700	0.82	0.82	14.59	14.63	14.69	14.10	19.74	19.84	25.91	26.11
2800	0.80	0.82	14.97	15.01	14.20	13.98	20.97	21.07	28.35	29.60
2900	0.81	0.82	15.36	15.43	13.79	13.55	22.43	22.77	35.83	39.14
3000	0.79	0.82	15.82	15.86	14.00	13.63	24.68	25.39	34.14	43.54
3250	0.78	0.85	17.45	17.48	13.60	12.90	30.43	36.07	24.25	24.66
3500	0.79	0.88	19.91	20.01	11.80	11.38	27.93	28.39	19.70	19.75
3750	0.82	0.94	23.59	23.66	9.59	9.14	25.05	24.66	18.01	18.08
4000	0.84	0.98	30.49	30.54	2.18	2.23	26.46	25.99	17.95	18.13
4250	0.85	0.96	41.40	40.27	9.43	10.53	42.31	34.86	21.62	21.75
4500	0.91	0.97	27.36	27.31	1.52	1.55	29.30	28.56	31.22	31.20
4750	1.01	1.05	22.53	22.72	4.70	4.79	20.99	20.87	27.55	26.62
5000	1.09	1.13	20.21	20.41	6.34	6.56	18.34	18.44	20.42	20.46
5250	1.18	1.27	18.67	18.95	7.59	8.02	17.32	17.42	16.92	17.34
5500	1.23	1.36	17.90	18.19	8.30	8.90	17.89	17.82	15.98	16.22
5750	1.23	1.43	17.39	17.70	9.57	9.72	21.07	20.80	15.50	15.78
6000	1.26	1.46	17.07	17.36	10.99	10.70	25.22	25.54	15.83	15.91
6500	1.32	1.46	17.03	17.33	14.02	12.20	27.51	28.58	17.98	17.09
7000	1.51	1.54	17.16	17.27	15.48	15.30	18.66	18.91	23.33	22.91
7500	1.79	1.78	16.69	16.87	13.18	13.69	14.09	14.04	22.56	22.36
8000	2.15	2.58	15.38	15.52	5.48	6.72	12.11	11.72	11.08	11.62