

Bi-Directional Coupler

BDCA-16-30+

Typical Performance Data

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

FREQ. (MHz)	INSERTION LOSS		COUPLING		DIRECTIVITY		RETURN LOSS			
	(dB) IN-OUT	(dB) FWD-REV	(dB) IN-FWD	(dB) OUT-REV	(dB) IN-REV	(dB) OUT-FWD	(dB) IN	(dB) OUT	(dB) FWD	(dB) REV
1000	0.24	0.24	20.22	20.22	29.78	30.80	37.08	38.01	37.43	38.54
1100	0.26	0.25	19.51	19.52	28.01	29.05	39.29	39.94	35.18	35.80
1200	0.28	0.27	18.89	18.90	26.21	26.98	43.36	45.99	33.49	33.87
1300	0.29	0.30	18.32	18.32	24.33	25.06	46.94	55.56	30.86	31.25
1400	0.31	0.31	17.84	17.84	23.36	23.58	39.10	41.25	28.84	29.00
1500	0.33	0.34	17.39	17.39	21.93	22.35	33.81	35.04	26.61	26.74
1600	0.35	0.36	17.00	17.00	20.91	21.12	30.31	30.98	24.86	24.88
1700	0.37	0.38	16.65	16.65	19.70	19.88	26.93	27.48	23.00	22.99
1800	0.40	0.41	16.33	16.33	18.89	18.87	24.55	24.92	21.53	21.52
1900	0.42	0.44	16.06	16.07	17.95	18.09	22.43	22.82	20.22	20.13
2000	0.46	0.47	15.82	15.83	17.35	17.41	21.05	21.28	19.00	19.04
2050	0.47	0.49	15.72	15.72	16.97	17.06	20.26	20.50	18.40	18.44
2100	0.49	0.50	15.62	15.62	16.69	16.74	19.50	19.75	18.02	17.97
2200	0.51	0.54	15.45	15.45	16.18	16.19	18.46	18.62	17.10	17.08
2300	0.54	0.57	15.29	15.29	15.77	15.69	17.35	17.53	16.50	16.42
2400	0.58	0.59	15.15	15.15	15.44	15.34	16.66	16.71	15.96	15.93
2500	0.61	0.62	15.02	15.02	15.23	14.94	16.00	16.06	15.69	15.56
2550	0.62	0.63	14.96	14.96	15.07	14.84	15.82	15.81	15.52	15.39
2600	0.63	0.64	14.89	14.90	15.04	14.82	15.73	15.66	15.39	15.33
2700	0.66	0.65	14.79	14.79	14.87	14.44	15.32	15.29	15.41	15.30
2800	0.67	0.66	14.68	14.70	14.68	14.37	15.28	15.20	15.47	15.38
2900	0.69	0.65	14.57	14.59	14.73	14.36	15.31	15.22	16.03	15.97
3000	0.69	0.66	14.45	14.45	14.83	14.40	15.61	15.57	16.61	16.53
3100	0.70	0.65	14.38	14.36	14.87	14.33	16.10	16.01	17.73	17.68
3200	0.68	0.64	14.26	14.26	15.22	14.63	16.71	16.79	19.11	19.02
3300	0.69	0.64	14.20	14.22	15.23	14.81	17.67	17.76	21.13	21.13
3400	0.67	0.64	14.15	14.12	15.63	15.29	19.02	19.19	24.35	23.98
3500	0.66	0.64	14.11	14.10	15.93	15.84	20.91	21.09	28.23	29.04
3600	0.66	0.64	14.12	14.08	16.45	16.17	23.39	23.84	37.21	40.21
3700	0.66	0.66	14.17	14.16	16.47	16.21	27.50	28.45	30.34	31.40
3800	0.65	0.67	14.24	14.26	16.70	16.39	33.31	38.15	24.08	24.21
3900	0.67	0.70	14.28	14.33	17.73	17.54	35.59	36.32	21.32	21.25
4000	0.69	0.74	14.49	14.49	17.67	17.60	28.25	28.06	18.78	18.88
4050	0.68	0.74	14.53	14.50	17.88	17.98	26.46	26.11	18.06	18.11
4100	0.68	0.75	14.67	14.67	17.53	17.80	24.50	24.12	17.29	17.31
4150	0.69	0.77	14.68	14.70	17.87	18.09	23.02	22.80	16.54	16.66
4200	0.71	0.79	14.79	14.84	17.64	18.14	22.13	21.80	15.95	16.10
4300	0.73	0.83	14.95	14.98	17.74	18.27	20.27	19.98	15.09	15.08
4350	0.75	0.85	15.13	15.14	17.30	18.16	19.46	19.18	14.44	14.57
4400	0.74	0.87	15.22	15.21	17.03	17.71	19.01	18.71	14.06	14.21
4450	0.76	0.88	15.27	15.30	16.72	17.61	18.61	18.39	13.85	13.91
4500	0.77	0.90	15.38	15.38	16.39	17.25	18.02	17.81	13.59	13.65
5000	0.77	0.96	16.67	16.68	12.81	13.09	18.08	18.03	12.97	12.99
5250	0.79	0.97	17.50	17.40	11.09	11.75	19.86	20.19	13.23	13.40
5500	0.76	0.93	18.22	18.13	9.52	9.98	24.58	24.83	14.01	14.13
5750	0.73	0.90	19.09	19.04	7.99	8.48	41.55	33.30	14.96	15.10
6000	0.75	0.87	20.31	20.35	6.68	7.34	33.26	31.54	15.96	16.02
6500	0.80	0.82	22.62	23.02	4.29	5.19	22.72	23.84	20.04	19.43
6750	0.79	0.82	24.15	24.07	3.46	3.97	22.58	23.45	22.06	21.86
7000	0.81	0.81	25.39	25.52	2.46	3.14	23.34	23.67	25.99	24.42
7250	0.83	0.82	26.56	26.84	1.85	2.63	23.32	23.29	34.72	28.33
7500	0.84	0.84	27.87	27.93	1.64	1.83	23.39	22.70	52.43	30.81
8000	0.91	0.95	30.88	31.14	0.08	0.48	21.95	20.82	24.58	23.65

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Bi-Directional Coupler

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Typical Performance Data

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

FREQ. (MHz)	INSERTION LOSS		COUPLING		DIRECTIVITY		RETURN LOSS			
	(dB) IN-OUT	(dB) FWD-REV	(dB) IN-FWD	(dB) OUT-REV	(dB) IN-REV	(dB) OUT-FWD	(dB) IN	(dB) OUT	(dB) FWD	(dB) REV
1000	0.13	0.14	20.20	20.14	29.94	31.30	40.90	44.21	35.94	36.84
1100	0.15	0.15	19.48	19.42	28.19	28.75	42.29	45.80	33.85	33.97
1200	0.16	0.17	18.85	18.79	26.61	26.73	43.03	51.03	33.60	33.79
1300	0.18	0.18	18.27	18.21	24.62	25.18	45.64	50.88	30.20	30.32
1400	0.19	0.19	17.78	17.72	23.51	23.17	40.56	42.67	28.19	28.16
1500	0.20	0.21	17.34	17.27	22.00	22.10	33.49	34.79	26.40	26.39
1600	0.21	0.23	16.93	16.87	20.59	20.96	29.80	30.13	24.42	24.32
1700	0.23	0.25	16.58	16.50	19.54	19.89	26.69	26.98	22.62	22.53
1800	0.25	0.27	16.26	16.17	19.12	18.88	24.24	24.55	21.66	21.55
1900	0.27	0.29	15.97	15.90	18.15	17.76	22.38	22.72	20.61	20.41
2000	0.30	0.32	15.73	15.65	17.34	17.18	21.28	21.40	18.86	18.84
2050	0.31	0.34	15.63	15.54	16.80	16.74	20.27	20.34	18.24	18.23
2100	0.32	0.35	15.53	15.44	16.42	16.23	19.26	19.31	17.63	17.49
2200	0.34	0.37	15.36	15.25	16.13	16.11	18.23	18.24	17.19	17.15
2300	0.37	0.41	15.19	15.10	15.72	15.15	17.31	17.35	16.20	15.96
2400	0.40	0.43	15.05	14.95	15.26	14.87	16.46	16.38	15.60	15.52
2500	0.43	0.46	14.94	14.84	14.85	14.17	15.63	15.51	14.89	14.65
2550	0.44	0.45	14.87	14.75	14.70	14.60	15.53	15.34	15.17	15.05
2600	0.44	0.46	14.78	14.67	14.73	14.83	15.66	15.40	15.15	15.08
2700	0.46	0.47	14.67	14.57	14.62	14.47	15.31	15.08	15.13	14.93
2800	0.47	0.48	14.57	14.47	14.44	14.02	15.12	14.91	14.97	14.78
2900	0.48	0.46	14.45	14.34	14.61	14.36	15.33	15.07	15.64	15.47
3000	0.47	0.45	14.31	14.19	14.90	14.25	15.56	15.35	16.39	16.22
3100	0.49	0.44	14.25	14.11	14.79	14.04	15.75	15.52	17.41	17.13
3200	0.47	0.43	14.13	14.01	14.84	14.50	16.11	16.01	18.64	18.43
3300	0.47	0.41	14.03	13.93	14.84	14.97	17.32	17.15	20.92	20.90
3400	0.44	0.41	13.99	13.82	15.33	15.23	18.86	18.83	23.65	23.25
3500	0.43	0.40	13.91	13.78	15.69	16.04	20.53	20.43	27.31	28.51
3600	0.42	0.40	13.94	13.76	16.45	16.39	23.01	23.19	34.63	47.31
3700	0.42	0.42	13.97	13.82	16.78	16.60	26.42	26.96	29.27	31.17
3800	0.40	0.42	14.06	13.92	16.84	17.27	31.57	32.97	23.22	23.68
3900	0.41	0.45	14.09	13.98	18.18	18.42	36.57	47.01	21.11	21.31
4000	0.42	0.47	14.29	14.09	17.87	18.75	30.64	30.66	19.27	19.58
4050	0.41	0.46	14.32	14.11	18.00	19.03	28.41	28.35	18.74	18.96
4100	0.42	0.50	14.44	14.35	17.67	18.40	26.46	25.97	17.75	17.75
4150	0.42	0.50	14.46	14.29	17.67	19.15	24.18	23.83	16.83	17.00
4200	0.44	0.52	14.54	14.40	17.53	19.54	22.63	22.11	16.31	16.49
4300	0.46	0.53	14.70	14.54	17.26	19.52	20.10	19.59	15.56	15.49
4350	0.47	0.56	14.89	14.69	17.03	19.37	19.15	18.76	14.85	14.89
4400	0.47	0.58	14.95	14.76	17.11	19.05	18.81	18.55	14.42	14.45
4450	0.47	0.59	15.04	14.87	16.69	18.24	18.46	18.30	14.04	13.91
4500	0.47	0.59	15.07	14.91	16.42	18.01	18.11	17.88	13.92	13.73
5000	0.47	0.64	16.44	16.26	13.05	13.77	17.16	16.90	12.63	12.52
5250	0.46	0.64	17.20	16.87	11.31	11.85	19.02	19.08	12.70	12.61
5500	0.42	0.65	17.99	17.71	10.17	10.05	23.17	23.54	12.76	12.59
5750	0.38	0.60	18.69	18.50	8.82	7.96	28.33	28.49	13.67	13.33
6000	0.39	0.56	19.88	19.75	6.90	6.86	37.37	32.93	14.87	14.67
6500	0.42	0.44	22.17	22.35	4.42	5.14	23.26	23.80	20.06	19.65
6750	0.41	0.43	23.62	23.37	3.35	4.39	22.04	22.49	21.98	22.55
7000	0.41	0.42	25.01	24.73	2.53	3.06	22.66	23.02	25.02	24.90
7250	0.41	0.42	26.23	26.17	1.74	2.65	24.92	25.07	26.60	26.00
7500	0.42	0.42	27.49	27.07	1.59	1.51	25.11	24.23	27.89	27.64
8000	0.46	0.51	30.04	30.29	0.62	0.16	21.43	21.13	25.25	22.38

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Bi-Directional Coupler

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Typical Performance Data

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

FREQ. (MHz)	INSERTION LOSS		COUPLING		DIRECTIVITY		RETURN LOSS			
	(dB) IN-OUT	(dB) FWD-REV	(dB) IN-FWD	(dB) OUT-REV	(dB) IN-REV	(dB) OUT-FWD	(dB) IN	(dB) OUT	(dB) FWD	(dB) REV
1000	0.30	0.31	20.22	20.26	29.99	30.95	35.70	35.80	39.96	42.28
1100	0.33	0.33	19.51	19.56	28.12	29.12	38.58	38.48	37.54	38.45
1200	0.34	0.35	18.89	18.94	26.29	27.22	43.80	44.47	34.93	35.50
1300	0.37	0.38	18.32	18.38	24.43	25.31	45.63	49.65	31.66	32.49
1400	0.39	0.40	17.84	17.90	23.48	23.80	37.35	38.78	29.27	29.83
1500	0.42	0.43	17.41	17.47	22.13	22.68	33.05	34.02	26.67	27.21
1600	0.44	0.46	17.02	17.09	21.30	21.30	29.81	30.51	24.86	25.28
1700	0.47	0.49	16.67	16.74	20.09	19.94	26.67	27.30	22.93	23.27
1800	0.49	0.53	16.36	16.44	19.26	18.98	24.47	24.83	21.20	21.50
1900	0.52	0.56	16.09	16.18	18.36	18.37	22.54	22.89	19.96	20.17
2000	0.56	0.59	15.86	15.94	17.86	17.72	21.10	21.34	19.04	19.33
2050	0.57	0.61	15.75	15.84	17.54	17.38	20.40	20.69	18.49	18.74
2100	0.59	0.63	15.65	15.74	17.32	17.13	19.84	20.13	18.15	18.30
2200	0.61	0.67	15.48	15.57	16.80	16.50	19.00	19.18	17.11	17.19
2300	0.65	0.70	15.33	15.41	16.43	16.05	17.84	18.08	16.62	16.66
2400	0.68	0.72	15.18	15.27	16.15	15.80	17.17	17.29	16.31	16.39
2500	0.71	0.75	15.03	15.14	16.06	15.59	16.74	16.85	16.29	16.22
2550	0.73	0.77	14.99	15.09	15.98	15.19	16.52	16.62	15.96	15.77
2600	0.73	0.78	14.92	15.03	15.94	14.93	16.32	16.38	15.73	15.61
2700	0.77	0.79	14.82	14.93	15.80	14.64	15.88	15.96	15.98	15.79
2800	0.79	0.81	14.72	14.85	15.56	14.73	15.90	15.92	16.20	16.03
2900	0.81	0.80	14.62	14.74	15.59	14.63	15.89	15.89	16.89	16.63
3000	0.81	0.81	14.50	14.62	15.68	14.89	16.22	16.31	17.65	17.40
3100	0.83	0.82	14.42	14.54	15.62	15.01	16.80	16.85	18.90	18.57
3200	0.83	0.81	14.33	14.47	16.04	15.01	17.31	17.59	20.65	20.14
3300	0.83	0.82	14.29	14.43	16.25	15.08	18.28	18.57	23.03	22.29
3400	0.82	0.83	14.25	14.38	16.57	15.73	19.65	20.14	27.37	25.85
3500	0.82	0.83	14.23	14.34	16.85	16.14	21.51	21.97	32.19	30.64
3600	0.83	0.85	14.26	14.35	17.08	16.51	24.33	25.23	37.19	33.82
3700	0.83	0.88	14.32	14.41	17.27	16.82	28.59	29.97	27.84	27.75
3800	0.82	0.89	14.41	14.61	17.25	16.59	33.57	44.88	23.28	22.85
3900	0.85	0.93	14.44	14.59	18.45	17.76	32.78	34.46	20.86	20.38
4000	0.87	0.98	14.60	14.77	18.61	18.36	27.16	27.03	18.33	18.08
4050	0.87	1.00	14.72	14.86	18.05	17.95	25.26	25.22	17.39	17.01
4100	0.87	1.01	14.89	15.07	17.45	17.54	23.60	23.29	16.86	16.47
4150	0.88	1.03	14.86	15.04	18.11	18.31	22.61	22.41	16.35	16.15
4200	0.89	1.05	14.96	15.18	18.04	18.30	22.08	21.76	15.85	15.55
4300	0.92	1.09	15.15	15.30	18.44	18.93	20.57	20.43	15.26	14.90
4350	0.94	1.12	15.28	15.45	17.88	18.86	19.73	19.59	14.73	14.56
4400	0.93	1.12	15.42	15.61	16.59	17.43	18.97	18.80	14.35	14.19
4450	0.95	1.14	15.46	15.65	16.56	17.41	18.57	18.48	14.22	14.03
4500	0.97	1.17	15.59	15.80	16.46	17.42	18.10	17.90	14.01	13.84
5000	1.03	1.29	16.96	17.04	12.57	13.56	18.25	18.48	13.59	14.18
5250	1.02	1.30	17.67	17.76	10.66	11.69	20.49	21.13	13.68	14.94
5500	1.00	1.31	18.61	18.74	8.92	10.23	25.57	25.35	14.28	15.92
5750	0.99	1.33	19.48	19.70	7.69	9.41	33.99	29.88	14.64	16.09
6000	1.01	1.33	20.66	20.94	6.18	7.62	28.88	28.58	15.13	15.83
6500	1.12	1.37	22.90	23.68	4.00	4.82	22.38	23.63	20.27	17.52
6750	1.10	1.40	24.31	24.87	3.52	3.52	22.45	23.87	23.32	18.30
7000	1.12	1.46	25.70	26.53	2.60	2.74	22.05	23.49	30.98	19.56
7250	1.15	1.58	27.32	28.14	1.76	2.10	21.76	22.64	26.87	19.53
7500	1.17	1.69	29.08	29.36	1.69	2.05	21.92	21.60	22.96	19.25
8000	1.27	1.93	31.73	32.54	0.50	0.94	21.11	19.76	28.62	16.86

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