

2 Way-180° Power Splitter/Combiner

SBTCJ-1W+

Typical Performance Data

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

FREQUENCY (MHz)	TOTAL LOSS ¹ (dB)		AMPLITUDE UNBALANCE (dB)	ISOLATION (dB) 1-2	PHASE UNBAL. from 180° (Deg)	FREQUENCY (MHz)	VSWR (:1)		
	S-1	S-2					S	1	2
1.0	3.96	4.00	0.04	22.87	0.16	1.0	1.33	1.18	1.19
2.0	3.88	3.92	0.04	22.92	0.17	2.0	1.27	1.14	1.15
3.0	3.81	3.84	0.03	22.97	0.18	3.0	1.22	1.12	1.12
5.0	3.66	3.68	0.02	23.07	0.19	5.0	1.15	1.08	1.08
7.0	3.58	3.60	0.02	23.01	0.20	7.0	1.12	1.06	1.06
9.0	3.57	3.59	0.01	22.78	0.20	9.0	1.12	1.05	1.05
10.0	3.57	3.58	0.01	22.67	0.20	10.0	1.11	1.05	1.05
12.0	3.57	3.58	0.01	22.53	0.21	12.0	1.11	1.04	1.04
14.0	3.58	3.58	0.00	22.46	0.22	14.0	1.11	1.04	1.04
16.0	3.58	3.58	0.00	22.40	0.23	16.0	1.10	1.04	1.04
18.0	3.58	3.58	0.00	22.38	0.23	18.0	1.10	1.04	1.04
20.0	3.58	3.59	0.01	22.37	0.23	20.0	1.10	1.03	1.04
30.0	3.60	3.60	0.00	22.34	0.28	30.0	1.10	1.03	1.03
40.0	3.61	3.61	0.00	22.36	0.36	40.0	1.10	1.03	1.03
50.0	3.61	3.61	0.00	22.39	0.41	50.0	1.10	1.03	1.03
100.0	3.64	3.65	0.01	22.51	0.75	100.0	1.10	1.04	1.05
150.0	3.65	3.67	0.02	22.69	1.08	150.0	1.10	1.05	1.06
200.0	3.66	3.70	0.04	22.93	1.42	200.0	1.11	1.06	1.07
250.0	3.66	3.73	0.07	23.22	1.75	250.0	1.12	1.07	1.09
300.0	3.66	3.76	0.10	23.59	2.08	300.0	1.13	1.09	1.11
350.0	3.67	3.80	0.13	23.99	2.41	350.0	1.14	1.10	1.13
400.0	3.66	3.84	0.18	24.49	2.69	400.0	1.16	1.12	1.16
450.0	3.66	3.89	0.23	25.08	3.05	450.0	1.17	1.14	1.18
500.0	3.66	3.94	0.28	25.75	3.35	500.0	1.18	1.17	1.21
550.0	3.67	3.99	0.32	26.52	3.67	550.0	1.20	1.19	1.24
600.0	3.67	4.06	0.39	27.35	3.96	600.0	1.21	1.23	1.28
650.0	3.68	4.13	0.45	28.11	4.27	650.0	1.23	1.26	1.32
700.0	3.70	4.22	0.52	28.78	4.53	700.0	1.24	1.30	1.36
750.0	3.71	4.29	0.58	29.02	4.76	750.0	1.26	1.35	1.41
800.0	3.74	4.39	0.65	28.79	5.02	800.0	1.28	1.39	1.46
850.0	3.77	4.49	0.72	28.16	5.24	850.0	1.30	1.44	1.51
900.0	3.80	4.59	0.79	27.08	5.46	900.0	1.32	1.50	1.57
950.0	3.85	4.70	0.85	25.81	5.59	950.0	1.34	1.56	1.63
1000.0	3.91	4.82	0.91	24.53	5.71	1000.0	1.36	1.62	1.70
1050.0	3.96	4.95	0.99	23.30	5.78	1050.0	1.38	1.68	1.77
1100.0	4.04	5.08	1.04	22.14	5.83	1100.0	1.40	1.74	1.85
1150.0	4.13	5.22	1.09	21.06	5.77	1150.0	1.42	1.81	1.93
1200.0	4.22	5.38	1.16	20.06	5.66	1200.0	1.44	1.88	2.02
1250.0	4.31	5.54	1.23	19.18	5.47	1250.0	1.46	1.95	2.12
1300.0	4.42	5.71	1.29	18.34	5.24	1300.0	1.49	2.02	2.22
1350.0	4.54	5.89	1.35	17.60	4.86	1350.0	1.51	2.09	2.32
1400.0	4.67	6.08	1.41	16.91	4.40	1400.0	1.54	2.17	2.44
1450.0	4.81	6.29	1.48	16.30	3.83	1450.0	1.57	2.24	2.56
1500.0	4.95	6.50	1.55	15.72	3.15	1500.0	1.59	2.32	2.68
1550.0	5.10	6.74	1.64	15.19	2.45	1550.0	1.63	2.40	2.82
1600.0	5.25	6.96	1.71	14.69	1.60	1600.0	1.66	2.48	2.97
1650.0	5.42	7.22	1.80	14.25	0.64	1650.0	1.69	2.55	3.12
1700.0	5.57	7.46	1.89	13.82	0.47	1700.0	1.72	2.63	3.29
1750.0	5.74	7.74	2.00	13.43	1.70	1750.0	1.75	2.71	3.46
1800.0	5.91	8.04	2.13	13.07	3.05	1800.0	1.78	2.79	3.65
1850.0	6.09	8.34	2.25	12.74	4.50	1850.0	1.82	2.86	3.84
1900.0	6.26	8.67	2.41	12.42	6.01	1900.0	1.85	2.94	4.03
1950.0	6.44	9.02	2.58	12.15	7.76	1950.0	1.88	3.01	4.24
2000.0	6.62	9.37	2.75	11.86	9.46	2000.0	1.92	3.09	4.46

¹Total Loss = Insertion Loss + 3dB Splitter Loss



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2 Way-180° Power Splitter/Combiner

SBTCJ-1W+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = -40°C

FREQUENCY (MHz)	TOTAL LOSS ¹ (dB)		AMPLITUDE UNBALANCE (dB)	ISOLATION (dB) 1-2	PHASE UNBAL. from 180° (Deg)	FREQUENCY (MHz)	VSWR (:1)		
	S-1	S-2					S	1	2
1.0	4.38	4.40	0.02	20.12	0.16	1.0	1.52	1.26	1.27
2.0	4.23	4.24	0.01	21.11	0.15	2.0	1.41	1.23	1.23
3.0	4.08	4.08	0.00	22.11	0.14	3.0	1.33	1.19	1.20
5.0	3.77	3.76	0.01	24.10	0.13	5.0	1.22	1.15	1.15
7.0	3.60	3.58	0.02	24.81	0.12	7.0	1.17	1.12	1.12
9.0	3.55	3.53	0.02	24.25	0.12	9.0	1.14	1.11	1.11
10.0	3.52	3.50	0.02	23.98	0.12	10.0	1.13	1.10	1.11
12.0	3.50	3.48	0.02	23.49	0.12	12.0	1.11	1.10	1.10
14.0	3.49	3.47	0.02	23.07	0.13	14.0	1.11	1.09	1.09
16.0	3.48	3.46	0.02	22.66	0.14	16.0	1.10	1.09	1.09
18.0	3.48	3.46	0.02	22.48	0.14	18.0	1.09	1.08	1.08
20.0	3.47	3.46	0.01	22.29	0.14	20.0	1.09	1.08	1.08
30.0	3.47	3.45	0.02	21.85	0.21	30.0	1.08	1.08	1.07
40.0	3.47	3.46	0.01	21.67	0.29	40.0	1.08	1.08	1.07
50.0	3.47	3.46	0.01	21.61	0.35	50.0	1.08	1.08	1.07
100.0	3.49	3.49	0.00	21.56	0.73	100.0	1.08	1.08	1.09
150.0	3.49	3.52	0.03	21.80	1.12	150.0	1.09	1.09	1.10
200.0	3.50	3.55	0.05	22.08	1.51	200.0	1.10	1.09	1.12
250.0	3.50	3.58	0.08	22.31	1.91	250.0	1.11	1.10	1.13
300.0	3.50	3.61	0.11	22.67	2.28	300.0	1.13	1.11	1.14
350.0	3.50	3.64	0.14	23.11	2.67	350.0	1.14	1.12	1.16
400.0	3.49	3.68	0.19	23.61	3.06	400.0	1.15	1.13	1.19
450.0	3.48	3.73	0.25	24.15	3.46	450.0	1.17	1.15	1.21
500.0	3.48	3.77	0.29	24.84	3.83	500.0	1.19	1.17	1.24
550.0	3.48	3.82	0.34	25.63	4.21	550.0	1.20	1.20	1.27
600.0	3.48	3.88	0.40	26.51	4.55	600.0	1.22	1.23	1.31
650.0	3.49	3.95	0.46	27.45	4.93	650.0	1.23	1.27	1.35
700.0	3.50	4.03	0.53	28.41	5.25	700.0	1.25	1.30	1.39
750.0	3.50	4.10	0.60	29.14	5.57	750.0	1.26	1.35	1.44
800.0	3.53	4.20	0.67	29.45	5.92	800.0	1.28	1.39	1.49
850.0	3.55	4.28	0.73	29.31	6.18	850.0	1.30	1.44	1.54
900.0	3.58	4.38	0.80	28.47	6.48	900.0	1.32	1.50	1.60
950.0	3.62	4.49	0.87	27.21	6.71	950.0	1.34	1.55	1.66
1000.0	3.67	4.61	0.94	25.82	6.92	1000.0	1.36	1.61	1.74
1050.0	3.72	4.73	1.01	24.49	7.07	1050.0	1.38	1.68	1.81
1100.0	3.79	4.86	1.07	23.24	7.24	1100.0	1.40	1.75	1.89
1150.0	3.86	5.00	1.14	22.02	7.31	1150.0	1.43	1.82	1.98
1200.0	3.94	5.15	1.21	20.91	7.37	1200.0	1.46	1.89	2.07
1250.0	4.04	5.31	1.27	19.96	7.34	1250.0	1.48	1.97	2.17
1300.0	4.14	5.46	1.32	19.07	7.26	1300.0	1.50	2.05	2.27
1350.0	4.27	5.64	1.37	18.23	7.03	1350.0	1.54	2.14	2.38
1400.0	4.39	5.83	1.44	17.45	6.76	1400.0	1.57	2.22	2.51
1450.0	4.53	6.02	1.49	16.77	6.44	1450.0	1.60	2.31	2.63
1500.0	4.68	6.25	1.57	16.21	5.80	1500.0	1.63	2.41	2.75
1550.0	4.82	6.45	1.63	15.57	5.38	1550.0	1.67	2.50	2.92
1600.0	4.98	6.68	1.70	15.04	4.72	1600.0	1.70	2.59	3.08
1650.0	5.15	6.91	1.76	14.56	3.92	1650.0	1.73	2.70	3.25
1700.0	5.32	7.17	1.85	14.14	2.93	1700.0	1.77	2.80	3.42
1750.0	5.49	7.42	1.93	13.70	1.87	1750.0	1.81	2.89	3.62
1800.0	5.67	7.70	2.03	13.31	0.72	1800.0	1.85	3.00	3.82
1850.0	5.86	7.99	2.13	12.96	0.56	1850.0	1.89	3.11	4.06
1900.0	6.03	8.31	2.28	12.62	1.91	1900.0	1.93	3.20	4.27
1950.0	6.22	8.62	2.40	12.29	3.41	1950.0	1.97	3.30	4.53
2000.0	6.39	8.95	2.56	11.99	5.20	2000.0	2.01	3.39	4.77

¹Total Loss = Insertion Loss + 3dB Splitter Loss



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2 Way-180° Power Splitter/Combiner

SBTCJ-1W+

Typical Performance Data

TEST CONDITIONS: INPUT POWER =0 dBm @Temperature = +85°C

FREQUENCY (MHz)	TOTAL LOSS ¹ (dB)		AMPLITUDE UNBALANCE (dB)	ISOLATION (dB)	PHASE UNBAL. from 180° (Deg)	FREQUENCY (MHz)	VSWR (:1)		
	S-1	S-2					S	1	2
1.0	4.13	4.14	0.01	21.87	0.01	1.0	1.35	1.19	1.19
2.0	4.06	4.07	0.01	22.03	0.03	2.0	1.30	1.15	1.15
3.0	3.99	4.00	0.01	22.19	0.05	3.0	1.26	1.12	1.12
5.0	3.85	3.86	0.01	22.52	0.08	5.0	1.19	1.07	1.07
7.0	3.78	3.79	0.01	22.65	0.11	7.0	1.16	1.05	1.06
9.0	3.77	3.78	0.01	22.59	0.12	9.0	1.16	1.05	1.05
10.0	3.77	3.78	0.01	22.56	0.13	10.0	1.15	1.04	1.04
12.0	3.77	3.78	0.01	22.52	0.15	12.0	1.15	1.04	1.04
14.0	3.78	3.78	0.00	22.51	0.17	14.0	1.15	1.04	1.04
16.0	3.78	3.78	0.00	22.50	0.19	16.0	1.15	1.04	1.04
18.0	3.78	3.78	0.00	22.50	0.19	18.0	1.15	1.04	1.03
20.0	3.78	3.79	0.01	22.51	0.20	20.0	1.15	1.04	1.03
30.0	3.80	3.80	0.00	22.54	0.29	30.0	1.15	1.04	1.03
40.0	3.81	3.81	0.00	22.58	0.37	40.0	1.15	1.04	1.03
50.0	3.82	3.83	0.01	22.64	0.45	50.0	1.14	1.04	1.03
100.0	3.85	3.85	0.00	22.82	0.84	100.0	1.15	1.03	1.03
150.0	3.86	3.88	0.02	22.89	1.18	150.0	1.14	1.05	1.03
200.0	3.87	3.91	0.04	23.08	1.56	200.0	1.14	1.06	1.04
250.0	3.87	3.94	0.07	23.38	1.89	250.0	1.15	1.07	1.06
300.0	3.88	3.98	0.10	23.71	2.25	300.0	1.16	1.09	1.08
350.0	3.88	4.01	0.13	24.02	2.59	350.0	1.17	1.10	1.10
400.0	3.88	4.06	0.18	24.38	2.93	400.0	1.18	1.12	1.12
450.0	3.88	4.11	0.23	24.81	3.29	450.0	1.20	1.14	1.14
500.0	3.88	4.17	0.29	25.29	3.63	500.0	1.21	1.17	1.17
550.0	3.89	4.23	0.34	25.82	3.97	550.0	1.23	1.20	1.21
600.0	3.89	4.30	0.41	26.30	4.31	600.0	1.24	1.23	1.24
650.0	3.90	4.37	0.47	26.59	4.68	650.0	1.26	1.27	1.28
700.0	3.92	4.45	0.53	26.67	5.00	700.0	1.28	1.31	1.32
750.0	3.93	4.53	0.60	26.50	5.31	750.0	1.30	1.35	1.36
800.0	3.97	4.64	0.67	26.05	5.62	800.0	1.31	1.40	1.41
850.0	4.00	4.73	0.73	25.39	5.92	850.0	1.33	1.44	1.46
900.0	4.04	4.84	0.80	24.52	6.21	900.0	1.35	1.50	1.51
950.0	4.09	4.95	0.86	23.56	6.43	950.0	1.37	1.55	1.57
1000.0	4.15	5.07	0.92	22.58	6.59	1000.0	1.39	1.61	1.63
1050.0	4.22	5.19	0.97	21.63	6.71	1050.0	1.41	1.66	1.70
1100.0	4.30	5.32	1.02	20.70	6.79	1100.0	1.43	1.73	1.76
1150.0	4.39	5.45	1.06	19.80	6.75	1150.0	1.45	1.78	1.84
1200.0	4.48	5.60	1.12	18.97	6.62	1200.0	1.47	1.85	1.92
1250.0	4.59	5.75	1.16	18.24	6.47	1250.0	1.49	1.91	2.00
1300.0	4.70	5.91	1.21	17.53	6.20	1300.0	1.51	1.97	2.09
1350.0	4.82	6.08	1.26	16.88	5.75	1350.0	1.53	2.03	2.18
1400.0	4.95	6.26	1.31	16.29	5.23	1400.0	1.55	2.10	2.28
1450.0	5.09	6.46	1.37	15.75	4.61	1450.0	1.58	2.16	2.38
1500.0	5.24	6.69	1.45	15.27	3.81	1500.0	1.60	2.22	2.49
1550.0	5.37	6.88	1.51	14.76	3.06	1550.0	1.63	2.28	2.62
1600.0	5.53	7.11	1.58	14.32	2.07	1600.0	1.65	2.33	2.75
1650.0	5.69	7.35	1.66	13.91	0.98	1650.0	1.68	2.39	2.89
1700.0	5.84	7.61	1.77	13.56	0.28	1700.0	1.71	2.45	3.02
1750.0	6.01	7.88	1.87	13.19	1.59	1750.0	1.74	2.51	3.19
1800.0	6.18	8.17	1.99	12.89	3.07	1800.0	1.76	2.56	3.35
1850.0	6.35	8.48	2.13	12.59	4.59	1850.0	1.80	2.62	3.53
1900.0	6.51	8.80	2.29	12.29	6.19	1900.0	1.82	2.67	3.71
1950.0	6.69	9.14	2.45	12.03	7.99	1950.0	1.86	2.73	3.92
2000.0	6.86	9.50	2.64	11.79	9.93	2000.0	1.89	2.79	4.11

¹Total Loss = Insertion Loss + 3dB Splitter Loss



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