

# 12 Way-0° Power Splitter/Combiner

JEPS-12-10

## Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS <sup>1</sup> (dB)						AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB)					VSWR (:1)		
	S-1	S-3	S-5	S-7	S-9	S-12			1-3	1-5	2-3	6-7	11-12	S	1	12
10	12.15	12.07	12.14	12.16	12.13	12.19	0.12	0.69	33.39	37.57	33.23	33.20	28.94	1.52	1.61	1.58
20	12.03	11.97	12.03	12.06	12.03	12.06	0.09	0.32	35.79	39.30	35.26	35.06	34.33	1.38	1.43	1.41
30	11.95	11.89	11.95	11.98	11.95	11.97	0.08	0.28	36.24	39.96	35.45	35.25	35.84	1.33	1.36	1.35
40	11.91	11.85	11.91	11.93	11.91	11.93	0.08	0.32	36.21	40.44	35.21	34.98	35.48	1.30	1.33	1.31
50	11.89	11.84	11.89	11.91	11.89	11.91	0.08	0.40	35.93	40.83	34.74	34.53	34.41	1.29	1.30	1.29
60	11.89	11.83	11.89	11.91	11.88	11.91	0.07	0.47	35.54	41.18	34.22	33.98	33.18	1.28	1.29	1.28
70	11.89	11.84	11.89	11.91	11.89	11.90	0.07	0.55	35.09	41.52	33.66	33.43	31.98	1.27	1.27	1.26
80	11.90	11.84	11.89	11.91	11.89	11.91	0.07	0.68	34.62	41.79	33.11	32.87	30.88	1.26	1.26	1.25
90	11.91	11.85	11.90	11.92	11.90	11.92	0.07	0.73	34.16	42.09	32.59	32.33	29.90	1.26	1.24	1.24
100	11.92	11.86	11.91	11.93	11.91	11.93	0.07	0.81	33.70	42.35	32.10	31.81	29.01	1.26	1.23	1.23
150	12.01	11.94	12.00	12.01	12.01	12.01	0.07	1.22	31.63	43.72	29.98	29.65	25.73	1.26	1.18	1.19
200	12.12	12.05	12.11	12.11	12.13	12.12	0.08	1.61	29.95	45.12	28.45	28.09	23.63	1.29	1.15	1.15
250	12.25	12.17	12.25	12.23	12.27	12.26	0.10	1.94	28.66	46.26	27.45	27.05	22.25	1.35	1.10	1.12
300	12.41	12.31	12.40	12.37	12.43	12.41	0.12	2.32	27.76	46.63	26.89	26.46	21.38	1.43	1.09	1.10
350	12.56	12.45	12.56	12.52	12.59	12.57	0.14	2.71	27.19	45.95	26.76	26.29	20.92	1.51	1.09	1.10
400	12.72	12.59	12.71	12.65	12.74	12.72	0.15	3.06	26.94	44.52	27.04	26.52	20.80	1.58	1.12	1.12
425	12.78	12.65	12.77	12.71	12.80	12.79	0.16	3.27	26.95	43.66	27.36	26.80	20.87	1.60	1.14	1.13
450	12.84	12.70	12.83	12.75	12.85	12.84	0.16	3.45	27.03	42.78	27.80	27.18	21.01	1.62	1.15	1.14
475	12.89	12.74	12.87	12.79	12.89	12.89	0.16	3.61	27.19	41.82	28.37	27.70	21.23	1.62	1.17	1.16
500	12.93	12.77	12.91	12.81	12.92	12.92	0.16	3.78	27.43	40.87	29.11	28.35	21.53	1.62	1.18	1.17
525	12.95	12.79	12.93	12.82	12.94	12.94	0.16	3.95	27.75	39.92	30.03	29.17	21.92	1.60	1.19	1.18
550	12.96	12.80	12.94	12.83	12.94	12.96	0.16	4.15	28.16	38.96	31.18	30.17	22.37	1.57	1.20	1.18
575	12.97	12.80	12.95	12.82	12.94	12.96	0.17	4.32	28.66	38.06	32.62	31.39	22.92	1.52	1.21	1.19
600	12.96	12.80	12.94	12.81	12.93	12.95	0.17	4.50	29.25	37.19	34.45	32.89	23.53	1.47	1.22	1.19
650	12.96	12.79	12.94	12.78	12.90	12.94	0.17	4.88	30.74	35.59	40.06	36.95	24.97	1.34	1.22	1.20
700	12.97	12.81	12.97	12.78	12.89	12.94	0.19	5.27	32.59	34.33	47.17	41.48	26.59	1.20	1.22	1.19
750	13.02	12.87	13.04	12.82	12.91	12.98	0.22	5.69	34.69	33.44	40.00	39.46	28.25	1.08	1.20	1.18
800	13.11	12.98	13.17	12.91	12.98	13.07	0.26	6.15	36.62	33.07	35.58	35.58	29.93	1.10	1.19	1.17
850	13.25	13.13	13.33	13.03	13.09	13.18	0.30	6.67	37.67	33.08	33.18	32.97	31.60	1.19	1.17	1.15
900	13.40	13.29	13.53	13.19	13.22	13.33	0.34	7.20	37.12	33.80	31.46	30.98	32.35	1.27	1.14	1.14
925	13.50	13.38	13.64	13.28	13.30	13.42	0.36	7.51	36.25	34.41	30.60	30.05	31.69	1.30	1.13	1.13
950	13.60	13.49	13.75	13.37	13.38	13.52	0.38	7.81	35.13	35.32	29.75	29.12	30.14	1.34	1.11	1.12
975	13.72	13.61	13.89	13.49	13.49	13.64	0.40	8.15	33.84	36.55	28.72	28.15	28.13	1.39	1.09	1.12
1000	13.88	13.76	14.06	13.63	13.63	13.79	0.43	8.42	32.50	38.18	27.64	27.18	26.06	1.46	1.08	1.12

<sup>1</sup>Total Loss = Insertion Loss + 10.8dB Splitter Loss

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# 12 Way-0° Power Splitter/Combiner

JEPS-12-10

## Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS <sup>1</sup>						AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION					VSWR		
	(dB)								(dB)					(:1)		
	S-1	S-3	S-5	S-7	S-9	S-12			1-3	1-5	2-3	6-7	11-12	S	1	12
10	11.77	11.75	11.80	11.81	11.78	11.80	0.06	3.23	28.23	36.86	28.52	31.04	27.52	1.57	1.59	1.56
20	11.75	11.76	11.85	11.87	11.83	11.80	0.12	1.18	33.19	39.71	32.97	34.17	33.12	1.40	1.38	1.37
30	11.76	11.76	11.83	11.85	11.81	11.80	0.09	0.73	34.49	40.59	33.90	34.60	34.96	1.34	1.31	1.30
40	11.73	11.72	11.79	11.82	11.78	11.77	0.09	0.63	34.86	41.06	34.04	34.49	35.10	1.31	1.27	1.26
50	11.71	11.70	11.77	11.79	11.76	11.74	0.09	0.61	34.89	41.47	33.89	34.16	34.44	1.29	1.25	1.24
60	11.71	11.70	11.76	11.78	11.75	11.73	0.08	0.61	34.74	41.80	33.56	33.72	33.51	1.27	1.23	1.22
70	11.71	11.70	11.76	11.78	11.75	11.73	0.08	0.63	34.48	42.21	33.16	33.22	32.52	1.26	1.21	1.21
80	11.71	11.70	11.76	11.78	11.75	11.73	0.08	0.67	34.17	42.53	32.72	32.71	31.58	1.26	1.20	1.20
90	11.72	11.71	11.76	11.78	11.76	11.74	0.07	0.71	33.81	42.88	32.28	32.22	30.70	1.26	1.19	1.18
100	11.72	11.71	11.77	11.79	11.77	11.74	0.07	0.78	33.43	43.23	31.84	31.73	29.91	1.26	1.18	1.18
150	11.77	11.77	11.83	11.84	11.83	11.79	0.07	1.13	31.61	44.96	29.90	29.65	26.83	1.27	1.14	1.14
200	11.86	11.85	11.93	11.92	11.93	11.87	0.07	1.51	30.03	46.90	28.45	28.12	24.75	1.31	1.10	1.11
250	11.97	11.96	12.05	12.03	12.06	11.99	0.09	1.86	28.75	48.28	27.47	27.10	23.37	1.38	1.08	1.09
300	12.10	12.08	12.19	12.15	12.20	12.12	0.11	2.27	27.82	48.22	26.91	26.50	22.50	1.46	1.09	1.09
350	12.24	12.21	12.34	12.28	12.34	12.26	0.13	2.65	27.21	46.85	26.75	26.31	22.03	1.55	1.11	1.11
400	12.37	12.33	12.47	12.40	12.47	12.39	0.14	3.01	26.93	44.96	26.98	26.50	21.93	1.62	1.14	1.14
425	12.43	12.38	12.53	12.45	12.53	12.44	0.14	3.22	26.91	43.91	27.27	26.74	22.00	1.64	1.16	1.15
450	12.47	12.43	12.58	12.49	12.57	12.49	0.15	3.43	26.97	42.90	27.68	27.11	22.16	1.66	1.18	1.17
475	12.51	12.46	12.62	12.52	12.60	12.53	0.15	3.61	27.12	41.91	28.22	27.61	22.40	1.66	1.20	1.18
500	12.54	12.48	12.64	12.54	12.63	12.55	0.16	3.77	27.35	40.89	28.91	28.23	22.72	1.65	1.21	1.19
525	12.55	12.49	12.66	12.54	12.63	12.56	0.17	3.93	27.67	39.87	29.80	29.02	23.14	1.63	1.22	1.20
550	12.55	12.50	12.66	12.54	12.63	12.56	0.17	4.12	28.07	38.89	30.90	30.00	23.63	1.60	1.23	1.21
575	12.56	12.49	12.66	12.53	12.62	12.56	0.17	4.33	28.58	37.94	32.28	31.19	24.21	1.55	1.24	1.22
600	12.54	12.48	12.65	12.51	12.60	12.54	0.17	4.52	29.18	37.02	34.05	32.66	24.86	1.49	1.24	1.22
650	12.52	12.46	12.64	12.47	12.55	12.50	0.18	4.88	30.76	35.36	39.57	36.69	26.31	1.35	1.25	1.22
700	12.51	12.46	12.65	12.45	12.52	12.48	0.20	5.25	32.74	34.01	50.00	41.94	27.70	1.20	1.24	1.22
750	12.54	12.50	12.71	12.47	12.53	12.50	0.23	5.64	35.12	33.05	41.25	40.62	28.79	1.08	1.23	1.21
800	12.62	12.60	12.82	12.55	12.59	12.57	0.26	6.06	37.45	32.57	36.32	36.41	29.48	1.10	1.22	1.20
850	12.73	12.73	12.97	12.66	12.67	12.66	0.31	6.51	38.85	32.53	33.86	33.66	29.94	1.19	1.20	1.18
900	12.87	12.88	13.15	12.80	12.79	12.79	0.36	7.05	38.33	33.14	32.29	31.61	29.82	1.28	1.18	1.17
925	12.94	12.95	13.24	12.88	12.85	12.86	0.39	7.30	37.33	33.69	31.48	30.65	29.23	1.31	1.16	1.16
950	13.03	13.04	13.34	12.96	12.92	12.94	0.42	7.54	36.05	34.51	30.66	29.68	28.09	1.35	1.15	1.16
975	13.13	13.15	13.47	13.06	13.01	13.04	0.46	7.78	34.57	35.62	29.61	28.63	26.55	1.40	1.13	1.15
1000	13.26	13.28	13.63	13.20	13.13	13.16	0.50	8.10	33.06	37.12	28.44	27.59	24.84	1.47	1.11	1.15

<sup>1</sup>Total Loss = Insertion Loss + 10.8dB Splitter Loss

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# 12 Way-0° Power Splitter/Combiner

JEPS-12-10

## Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS <sup>1</sup> (dB)						AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB)					VSWR (:1)		
	S-1	S-3	S-5	S-7	S-9	S-12			1-3	1-5	2-3	6-7	11-12	S	1	12
10	12.31	12.23	12.33	12.36	12.32	12.34	0.13	0.82	34.36	37.01	33.65	33.62	28.24	1.99	1.81	1.78
20	12.13	12.06	12.16	12.18	12.15	12.16	0.13	0.66	36.48	38.52	35.46	35.45	33.53	1.47	1.37	1.36
30	12.08	11.98	12.10	12.12	12.09	12.10	0.14	0.64	36.94	39.26	35.63	35.68	35.75	1.38	1.28	1.28
40	12.06	11.96	12.08	12.11	12.06	12.08	0.15	0.69	36.79	39.75	35.33	35.37	35.69	1.33	1.24	1.24
50	12.06	11.95	12.08	12.11	12.07	12.07	0.16	0.69	36.39	40.16	34.86	34.84	34.48	1.31	1.21	1.21
60	12.07	11.96	12.09	12.12	12.07	12.08	0.16	0.71	35.86	40.48	34.29	34.18	33.00	1.29	1.19	1.19
70	12.08	11.97	12.11	12.13	12.09	12.09	0.16	0.74	35.30	40.70	33.73	33.54	31.61	1.28	1.17	1.18
80	12.09	11.98	12.12	12.14	12.10	12.10	0.17	0.82	34.75	40.97	33.17	32.91	30.38	1.27	1.16	1.16
90	12.11	11.99	12.14	12.16	12.12	12.12	0.17	0.88	34.19	41.21	32.63	32.32	29.30	1.27	1.15	1.16
100	12.12	12.00	12.16	12.17	12.13	12.13	0.17	0.91	33.67	41.41	32.11	31.75	28.34	1.27	1.14	1.15
150	12.23	12.10	12.26	12.27	12.24	12.23	0.17	1.29	31.40	42.54	29.97	29.48	24.90	1.29	1.11	1.11
200	12.35	12.21	12.38	12.39	12.38	12.35	0.18	1.69	29.68	43.71	28.44	27.89	22.78	1.35	1.09	1.10
250	12.49	12.34	12.53	12.52	12.53	12.50	0.20	2.05	28.43	44.73	27.43	26.86	21.41	1.43	1.09	1.10
300	12.66	12.49	12.70	12.67	12.71	12.67	0.22	2.43	27.57	45.27	26.88	26.31	20.54	1.51	1.11	1.11
350	12.84	12.64	12.87	12.83	12.88	12.84	0.25	2.82	27.07	44.98	26.75	26.20	20.09	1.60	1.14	1.14
400	13.00	12.78	13.03	12.97	13.04	13.00	0.26	3.18	26.88	43.99	27.06	26.50	19.96	1.67	1.17	1.17
425	13.07	12.84	13.10	13.04	13.11	13.07	0.27	3.38	26.91	43.26	27.38	26.80	20.02	1.70	1.19	1.18
450	13.13	12.90	13.15	13.09	13.17	13.14	0.27	3.55	27.01	42.49	27.83	27.22	20.15	1.71	1.21	1.20
475	13.19	12.94	13.20	13.13	13.22	13.19	0.28	3.72	27.18	41.64	28.42	27.78	20.36	1.71	1.22	1.21
500	13.23	12.98	13.25	13.16	13.25	13.23	0.28	3.89	27.43	40.77	29.16	28.46	20.64	1.70	1.24	1.22
525	13.26	13.00	13.27	13.18	13.28	13.26	0.28	4.03	27.77	39.87	30.09	29.31	20.99	1.68	1.25	1.23
550	13.27	13.01	13.29	13.19	13.29	13.27	0.28	4.22	28.17	39.00	31.26	30.35	21.42	1.64	1.26	1.24
575	13.29	13.02	13.31	13.20	13.29	13.29	0.28	4.38	28.66	38.13	32.71	31.60	21.93	1.59	1.27	1.24
600	13.29	13.02	13.31	13.19	13.29	13.29	0.29	4.57	29.23	37.30	34.57	33.13	22.50	1.53	1.27	1.25
650	13.30	13.03	13.34	13.19	13.28	13.29	0.30	4.97	30.62	35.80	40.25	37.09	23.88	1.38	1.27	1.25
700	13.33	13.06	13.38	13.20	13.29	13.31	0.32	5.42	32.28	34.57	46.54	40.45	25.52	1.22	1.27	1.24
750	13.40	13.14	13.47	13.26	13.32	13.36	0.33	5.88	34.07	33.78	39.67	37.93	27.39	1.08	1.26	1.23
800	13.50	13.25	13.60	13.36	13.41	13.46	0.35	6.39	35.59	33.38	35.36	34.42	29.60	1.09	1.25	1.22
850	13.64	13.41	13.79	13.49	13.53	13.59	0.38	6.92	36.33	33.48	32.97	31.92	32.36	1.20	1.24	1.21
900	13.81	13.59	14.00	13.66	13.68	13.75	0.41	7.47	35.85	34.29	31.25	29.97	34.97	1.28	1.21	1.20
925	13.91	13.68	14.12	13.76	13.77	13.85	0.44	7.80	35.11	34.96	30.37	29.10	34.55	1.32	1.20	1.19
950	14.02	13.80	14.24	13.86	13.86	13.97	0.44	8.15	34.20	35.92	29.52	28.24	32.49	1.35	1.18	1.19
975	14.16	13.93	14.39	13.99	13.98	14.10	0.47	8.54	33.12	37.21	28.52	27.37	29.87	1.40	1.17	1.18
1000	14.33	14.09	14.58	14.15	14.14	14.27	0.49	8.82	31.99	38.94	27.46	26.52	27.38	1.46	1.15	1.18

<sup>1</sup>Total Loss = Insertion Loss + 10.8dB Splitter Loss

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