

# 2 Way-90° Power Splitter/Combiner

# HPQ-05W

## Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS <sup>1</sup> (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. From 90° (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
150	0.59	9.78	9.19	0.39	36.81	1.04	1.03	1.04
200	0.95	7.66	6.71	0.34	34.82	1.05	1.04	1.04
250	1.37	6.15	4.78	0.27	33.42	1.05	1.05	1.05
300	1.83	5.04	3.21	0.21	32.18	1.06	1.07	1.07
350	2.31	4.19	1.88	0.15	31.09	1.07	1.08	1.08
360	2.41	4.05	1.64	0.13	30.84	1.08	1.08	1.08
370	2.52	3.91	1.40	0.11	30.65	1.08	1.08	1.08
380	2.61	3.78	1.17	0.09	30.41	1.08	1.08	1.09
390	2.72	3.66	0.94	0.07	30.17	1.08	1.09	1.09
400	2.81	3.54	0.73	0.08	29.95	1.08	1.09	1.09
410	2.92	3.42	0.51	0.06	29.71	1.08	1.09	1.09
420	3.01	3.32	0.30	0.04	29.45	1.09	1.09	1.10
430	3.11	3.22	0.11	0.02	29.23	1.09	1.10	1.10
440	3.22	3.12	0.10	0.00	28.99	1.09	1.10	1.10
450	3.31	3.03	0.29	0.01	28.76	1.09	1.10	1.10
460	3.41	2.95	0.47	0.00	28.55	1.09	1.10	1.10
470	3.51	2.86	0.66	0.03	28.32	1.10	1.10	1.11
480	3.62	2.77	0.84	0.04	28.06	1.10	1.10	1.11
490	3.71	2.69	1.02	0.07	27.82	1.10	1.11	1.11
500	3.81	2.62	1.19	0.09	27.58	1.10	1.11	1.11
510	3.91	2.55	1.36	0.08	27.35	1.10	1.11	1.12
520	4.01	2.48	1.52	0.13	27.12	1.10	1.11	1.12
530	4.11	2.42	1.69	0.15	26.88	1.11	1.11	1.12
540	4.20	2.36	1.84	0.18	26.64	1.11	1.12	1.12
550	4.30	2.30	2.00	0.20	26.40	1.11	1.12	1.12
600	4.78	2.04	2.74	0.29	25.30	1.12	1.13	1.13
650	5.24	1.82	3.42	0.41	24.25	1.13	1.13	1.14
700	5.69	1.65	4.04	0.53	23.29	1.13	1.14	1.15
750	6.12	1.50	4.62	0.70	22.40	1.14	1.15	1.16
800	6.54	1.39	5.15	0.87	21.57	1.15	1.16	1.17
850	6.94	1.28	5.66	1.04	20.78	1.16	1.16	1.17
900	7.32	1.20	6.12	1.23	20.07	1.17	1.17	1.18
950	7.68	1.14	6.54	1.47	19.39	1.17	1.18	1.19
1000	8.02	1.08	6.94	1.83	18.77	1.18	1.19	1.20
1050	8.35	1.04	7.31	2.17	18.17	1.19	1.21	1.21
1100	8.66	1.00	7.66	2.55	17.62	1.20	1.22	1.22
1150	8.95	0.98	7.97	3.00	17.08	1.22	1.23	1.23
1200	9.22	0.97	8.25	3.51	16.57	1.23	1.25	1.24
1250	9.48	0.96	8.52	4.11	16.08	1.24	1.27	1.26
1300	9.72	0.95	8.77	4.76	15.61	1.26	1.29	1.27

<sup>1</sup>Total Loss = Insertion Loss +3dB Splitter Loss



# 2 Way-90° Power Splitter/Combiner

# HPQ-05W

## Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS <sup>1</sup> (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. From 90° (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
150	0.54	9.82	9.28	0.58	38.35	1.04	1.04	1.04
200	0.89	7.68	6.79	0.67	35.68	1.06	1.06	1.05
250	1.29	6.15	4.86	0.74	34.08	1.06	1.07	1.06
300	1.74	5.03	3.29	0.82	32.27	1.07	1.08	1.07
350	2.22	4.17	1.95	0.90	30.87	1.08	1.09	1.08
360	2.32	4.02	1.70	0.90	30.58	1.08	1.09	1.08
370	2.42	3.89	1.47	0.91	30.33	1.08	1.09	1.09
380	2.51	3.75	1.24	0.93	30.03	1.09	1.09	1.09
390	2.61	3.63	1.02	0.93	29.76	1.09	1.10	1.09
400	2.71	3.51	0.79	0.96	29.49	1.09	1.10	1.09
410	2.81	3.39	0.58	0.98	29.24	1.09	1.10	1.10
420	2.91	3.28	0.37	1.00	28.98	1.09	1.10	1.10
430	3.01	3.18	0.17	1.02	28.78	1.09	1.10	1.10
440	3.11	3.08	0.02	1.02	28.58	1.09	1.10	1.10
450	3.20	2.99	0.22	1.01	28.31	1.09	1.11	1.11
460	3.30	2.90	0.41	1.05	28.13	1.10	1.11	1.11
470	3.40	2.81	0.59	1.06	27.88	1.10	1.11	1.11
480	3.50	2.72	0.77	1.07	27.60	1.10	1.11	1.11
490	3.59	2.64	0.95	1.08	27.33	1.10	1.11	1.11
500	3.70	2.57	1.13	1.10	27.06	1.10	1.12	1.12
510	3.79	2.50	1.29	1.11	26.79	1.11	1.12	1.12
520	3.89	2.42	1.46	1.10	26.55	1.11	1.12	1.12
530	3.99	2.36	1.63	1.12	26.28	1.11	1.12	1.12
540	4.08	2.29	1.79	1.12	26.04	1.11	1.12	1.12
550	4.18	2.23	1.95	1.12	25.79	1.12	1.12	1.12
600	4.65	1.96	2.68	1.19	24.72	1.12	1.13	1.14
650	5.10	1.74	3.36	1.20	23.87	1.13	1.13	1.15
700	5.55	1.56	3.99	1.23	22.95	1.14	1.14	1.16
750	5.98	1.41	4.57	1.19	22.16	1.14	1.15	1.17
800	6.38	1.28	5.10	1.19	21.40	1.15	1.15	1.17
850	6.78	1.17	5.61	1.16	20.54	1.16	1.16	1.18
900	7.16	1.09	6.07	1.11	19.81	1.17	1.17	1.18
950	7.51	1.02	6.49	1.00	19.14	1.18	1.18	1.19
1000	7.86	0.96	6.90	0.85	18.56	1.19	1.19	1.20
1050	8.18	0.91	7.27	0.66	17.99	1.20	1.20	1.21
1100	8.49	0.87	7.62	0.39	17.43	1.22	1.22	1.23
1150	8.77	0.84	7.93	0.15	17.00	1.22	1.23	1.24
1200	9.05	0.82	8.23	0.22	16.48	1.23	1.25	1.25
1250	9.30	0.80	8.50	0.63	16.00	1.25	1.27	1.26
1300	9.54	0.79	8.75	1.10	15.58	1.25	1.29	1.27

<sup>1</sup>Total Loss = Insertion Loss + 3dB Splitter Loss

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# 2 Way-90° Power Splitter/Combiner

# HPQ-05W

## Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS <sup>1</sup> (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. From 90° (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
150	0.62	9.80	9.18	0.49	36.69	1.04	1.03	1.04
200	0.98	7.68	6.70	0.42	35.07	1.04	1.04	1.04
250	1.40	6.18	4.78	0.31	33.69	1.05	1.05	1.06
300	1.87	5.08	3.21	0.24	32.48	1.06	1.06	1.07
350	2.35	4.24	1.89	0.15	31.46	1.07	1.07	1.08
360	2.46	4.09	1.63	0.11	31.18	1.07	1.08	1.08
370	2.56	3.96	1.40	0.09	30.95	1.08	1.08	1.09
380	2.66	3.83	1.17	0.09	30.69	1.08	1.08	1.09
390	2.76	3.71	0.95	0.05	30.45	1.08	1.08	1.09
400	2.86	3.59	0.73	0.05	30.21	1.08	1.09	1.09
410	2.96	3.47	0.52	0.03	29.97	1.09	1.09	1.09
420	3.06	3.38	0.32	0.02	29.72	1.09	1.09	1.10
430	3.16	3.27	0.11	0.01	29.51	1.09	1.09	1.10
440	3.26	3.18	0.08	0.03	29.25	1.09	1.09	1.10
450	3.35	3.08	0.28	0.07	29.01	1.09	1.10	1.10
460	3.46	3.00	0.47	0.07	28.79	1.09	1.10	1.10
470	3.56	2.91	0.65	0.09	28.54	1.10	1.10	1.11
480	3.67	2.83	0.84	0.10	28.26	1.10	1.10	1.11
490	3.76	2.75	1.01	0.14	28.00	1.10	1.10	1.11
500	3.86	2.68	1.18	0.15	27.76	1.10	1.11	1.11
510	3.96	2.61	1.35	0.16	27.51	1.10	1.11	1.12
520	4.06	2.54	1.51	0.20	27.28	1.10	1.11	1.12
530	4.16	2.48	1.68	0.22	27.01	1.11	1.11	1.12
540	4.25	2.42	1.83	0.26	26.77	1.11	1.11	1.12
550	4.35	2.36	1.99	0.28	26.52	1.11	1.12	1.12
600	4.83	2.10	2.72	0.40	25.36	1.12	1.12	1.13
650	5.29	1.89	3.40	0.56	24.25	1.12	1.13	1.14
700	5.75	1.72	4.03	0.70	23.27	1.13	1.14	1.15
750	6.18	1.57	4.60	0.88	22.35	1.14	1.15	1.15
800	6.59	1.46	5.13	1.07	21.50	1.15	1.16	1.16
850	7.00	1.36	5.63	1.29	20.72	1.15	1.17	1.17
900	7.38	1.29	6.09	1.51	19.99	1.16	1.18	1.18
950	7.74	1.22	6.52	1.82	19.32	1.17	1.19	1.19
1000	8.08	1.18	6.90	2.16	18.70	1.18	1.20	1.20
1050	8.41	1.14	7.28	2.57	18.10	1.19	1.21	1.21
1100	8.72	1.11	7.61	3.01	17.56	1.20	1.22	1.22
1150	9.02	1.09	7.93	3.48	17.02	1.22	1.24	1.23
1200	9.29	1.07	8.22	4.06	16.52	1.23	1.26	1.24
1250	9.56	1.07	8.49	4.71	16.04	1.25	1.27	1.26
1300	9.80	1.07	8.73	5.41	15.59	1.26	1.29	1.27

<sup>1</sup>Total Loss = Insertion Loss + 3dB Splitter Loss

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