

2 Way-90° Power Splitter/Combiner

HPQ-08

Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. From 90° (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
300	0.77	8.64	7.87	0.18	32.04	1.05	1.05	1.04
350	0.99	7.54	6.54	0.10	31.23	1.06	1.06	1.05
400	1.23	6.64	5.41	0.06	30.61	1.07	1.07	1.06
450	1.49	5.89	4.40	0.01	30.11	1.07	1.08	1.08
500	1.76	5.26	3.50	0.05	29.62	1.08	1.09	1.09
550	2.02	4.72	2.70	0.14	29.16	1.09	1.10	1.10
600	2.31	4.26	1.96	0.20	28.60	1.10	1.11	1.12
610	2.36	4.18	1.83	0.19	28.46	1.11	1.11	1.12
620	2.42	4.10	1.68	0.22	28.33	1.11	1.11	1.12
630	2.48	4.03	1.55	0.26	28.21	1.11	1.11	1.13
640	2.52	3.94	1.42	0.26	28.08	1.11	1.11	1.13
650	2.58	3.88	1.29	0.27	27.94	1.11	1.11	1.13
660	2.64	3.80	1.16	0.28	27.78	1.12	1.11	1.13
670	2.70	3.74	1.03	0.31	27.64	1.12	1.12	1.14
680	2.76	3.67	0.91	0.33	27.49	1.12	1.12	1.14
690	2.81	3.60	0.79	0.34	27.36	1.12	1.12	1.14
700	2.87	3.54	0.67	0.35	27.20	1.12	1.12	1.14
710	2.93	3.48	0.55	0.37	27.05	1.13	1.12	1.15
720	2.98	3.42	0.44	0.38	26.92	1.13	1.12	1.15
730	3.04	3.36	0.32	0.42	26.76	1.13	1.13	1.15
740	3.10	3.30	0.21	0.42	26.63	1.13	1.13	1.15
750	3.16	3.25	0.10	0.46	26.46	1.13	1.13	1.16
760	3.21	3.19	0.02	0.45	26.31	1.14	1.13	1.16
770	3.27	3.14	0.12	0.49	26.16	1.14	1.13	1.16
780	3.32	3.10	0.23	0.49	26.00	1.14	1.13	1.16
790	3.38	3.05	0.33	0.53	25.84	1.14	1.14	1.17
800	3.43	3.00	0.44	0.55	25.69	1.15	1.14	1.17
810	3.49	2.95	0.54	0.56	25.51	1.15	1.14	1.17
820	3.55	2.91	0.64	0.54	25.35	1.15	1.14	1.17
830	3.60	2.86	0.74	0.58	25.20	1.15	1.14	1.17
840	3.66	2.82	0.84	0.65	25.04	1.15	1.14	1.18
850	3.71	2.78	0.94	0.63	24.88	1.15	1.14	1.18
900	3.99	2.58	1.40	0.77	24.12	1.16	1.15	1.19
950	4.25	2.41	1.84	0.91	23.39	1.18	1.16	1.20
1000	4.52	2.27	2.25	1.03	22.70	1.19	1.17	1.21
1050	4.77	2.14	2.64	1.20	22.06	1.20	1.18	1.22
1100	5.03	2.02	3.00	1.40	21.43	1.21	1.19	1.23
1150	5.27	1.92	3.35	1.60	20.86	1.22	1.20	1.24
1200	5.51	1.84	3.67	1.81	20.32	1.23	1.22	1.25
1250	5.74	1.76	3.98	2.07	19.80	1.25	1.23	1.26
1300	5.96	1.69	4.28	2.29	19.30	1.26	1.25	1.27
1350	6.19	1.63	4.55	2.58	18.85	1.27	1.27	1.28
1400	6.40	1.58	4.82	2.88	18.42	1.29	1.29	1.29
1450	6.61	1.53	5.08	3.17	18.02	1.31	1.31	1.30
1500	6.81	1.49	5.32	3.50	17.65	1.32	1.33	1.32
1600	7.20	1.43	5.77	4.25	16.96	1.36	1.38	1.35
1700	7.58	1.39	6.19	5.13	16.34	1.40	1.43	1.38
1800	7.94	1.38	6.56	6.12	15.78	1.44	1.49	1.42

¹ Total Loss = Insertion Loss+3dB Splitter Loss

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2 Way-90° Power Splitter/Combiner

HPQ-08

Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. From 90° (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
300	0.70	8.72	8.02	0.47	33.36	1.06	1.07	1.05
350	0.91	7.61	6.70	0.62	32.37	1.07	1.08	1.06
400	1.14	6.70	5.56	0.78	31.59	1.08	1.09	1.07
450	1.39	5.94	4.55	0.90	30.89	1.09	1.10	1.08
500	1.65	5.30	3.65	1.06	30.14	1.09	1.10	1.09
550	1.91	4.76	2.85	1.23	29.38	1.10	1.11	1.11
600	2.18	4.29	2.11	1.40	28.58	1.11	1.12	1.12
610	2.24	4.21	1.98	1.44	28.40	1.11	1.12	1.13
620	2.29	4.13	1.84	1.47	28.24	1.12	1.12	1.13
630	2.35	4.05	1.70	1.51	28.09	1.12	1.12	1.13
640	2.40	3.97	1.57	1.53	27.94	1.12	1.12	1.13
650	2.45	3.90	1.44	1.58	27.79	1.12	1.12	1.14
660	2.51	3.82	1.31	1.61	27.60	1.12	1.12	1.14
670	2.56	3.75	1.18	1.65	27.42	1.12	1.12	1.14
680	2.62	3.69	1.07	1.70	27.25	1.13	1.12	1.14
690	2.67	3.62	0.95	1.73	27.10	1.13	1.13	1.15
700	2.73	3.55	0.82	1.76	26.94	1.13	1.13	1.15
710	2.79	3.49	0.70	1.79	26.77	1.13	1.13	1.15
720	2.84	3.43	0.59	1.82	26.62	1.13	1.13	1.15
730	2.90	3.37	0.47	1.88	26.44	1.14	1.13	1.16
740	2.96	3.31	0.36	1.92	26.28	1.14	1.13	1.16
750	3.01	3.26	0.25	1.97	26.11	1.14	1.14	1.16
760	3.06	3.20	0.14	1.99	25.96	1.14	1.14	1.16
770	3.12	3.15	0.04	2.03	25.78	1.14	1.14	1.17
780	3.17	3.11	0.07	2.07	25.60	1.14	1.14	1.17
790	3.23	3.05	0.18	2.11	25.45	1.15	1.14	1.17
800	3.28	3.01	0.28	2.16	25.28	1.15	1.14	1.17
810	3.34	2.95	0.38	2.17	25.11	1.15	1.14	1.17
820	3.39	2.91	0.48	2.17	24.95	1.15	1.14	1.18
830	3.45	2.86	0.59	2.23	24.78	1.15	1.14	1.18
840	3.50	2.82	0.68	2.33	24.62	1.16	1.14	1.18
850	3.55	2.78	0.78	2.32	24.45	1.16	1.15	1.18
900	3.82	2.57	1.24	2.55	23.69	1.17	1.15	1.19
950	4.08	2.40	1.68	2.80	22.97	1.18	1.16	1.20
1000	4.34	2.26	2.09	3.03	22.30	1.19	1.17	1.21
1050	4.59	2.12	2.48	3.30	21.66	1.20	1.18	1.22
1100	4.84	2.00	2.83	3.60	21.05	1.21	1.19	1.23
1150	5.08	1.89	3.19	3.89	20.50	1.22	1.20	1.24
1200	5.32	1.81	3.51	4.22	19.97	1.23	1.21	1.25
1250	5.54	1.72	3.82	4.54	19.45	1.25	1.23	1.26
1300	5.76	1.65	4.12	4.89	18.98	1.26	1.24	1.27
1350	5.98	1.58	4.39	5.30	18.54	1.27	1.26	1.28
1400	6.19	1.53	4.66	5.65	18.12	1.29	1.28	1.29
1450	6.39	1.49	4.90	6.06	17.73	1.30	1.30	1.30
1500	6.59	1.44	5.15	6.51	17.38	1.32	1.33	1.31
1600	6.98	1.37	5.61	7.45	16.71	1.35	1.38	1.34
1700	7.35	1.33	6.03	8.51	16.11	1.39	1.44	1.37
1800	7.71	1.30	6.41	9.67	15.58	1.43	1.50	1.41

¹ Total Loss = Insertion Loss+3dB Splitter Loss

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2 Way-90° Power Splitter/Combiner

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Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. From 90° (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
300	0.78	8.77	7.99	0.30	33.76	1.05	1.06	1.05
350	1.00	7.67	6.66	0.26	32.91	1.06	1.06	1.06
400	1.23	6.76	5.53	0.23	32.17	1.07	1.08	1.07
450	1.49	6.00	4.51	0.21	31.48	1.08	1.08	1.08
500	1.75	5.37	3.62	0.16	30.75	1.09	1.09	1.09
550	2.01	4.83	2.82	0.10	30.01	1.10	1.10	1.10
600	2.30	4.36	2.07	0.07	29.19	1.10	1.11	1.12
610	2.35	4.28	1.94	0.07	28.98	1.11	1.11	1.12
620	2.41	4.21	1.80	0.06	28.81	1.11	1.11	1.12
630	2.47	4.13	1.66	0.05	28.64	1.11	1.11	1.12
640	2.51	4.05	1.54	0.04	28.49	1.11	1.11	1.13
650	2.57	3.98	1.40	0.01	28.31	1.12	1.12	1.13
660	2.62	3.90	1.28	0.03	28.09	1.12	1.12	1.13
670	2.69	3.84	1.15	0.01	27.89	1.12	1.12	1.13
680	2.74	3.77	1.02	0.02	27.70	1.12	1.12	1.14
690	2.80	3.70	0.90	0.04	27.52	1.12	1.12	1.14
700	2.85	3.63	0.78	0.05	27.34	1.12	1.12	1.14
710	2.91	3.58	0.67	0.04	27.14	1.13	1.13	1.14
720	2.97	3.52	0.55	0.05	26.96	1.13	1.13	1.14
730	3.02	3.45	0.43	0.10	26.75	1.13	1.13	1.15
740	3.08	3.40	0.33	0.08	26.58	1.13	1.13	1.15
750	3.13	3.34	0.21	0.11	26.40	1.13	1.13	1.15
760	3.19	3.29	0.10	0.09	26.23	1.14	1.13	1.15
770	3.25	3.24	0.00	0.11	26.04	1.14	1.13	1.16
780	3.30	3.19	0.12	0.15	25.85	1.14	1.14	1.16
790	3.36	3.14	0.22	0.16	25.67	1.14	1.14	1.16
800	3.41	3.09	0.33	0.18	25.49	1.14	1.14	1.16
810	3.47	3.04	0.42	0.16	25.30	1.14	1.14	1.16
820	3.52	2.99	0.53	0.15	25.13	1.15	1.14	1.17
830	3.58	2.95	0.63	0.19	24.96	1.15	1.14	1.17
840	3.63	2.91	0.72	0.25	24.78	1.15	1.14	1.17
850	3.69	2.87	0.82	0.22	24.60	1.15	1.15	1.17
900	3.97	2.67	1.29	0.32	23.79	1.16	1.15	1.18
950	4.22	2.50	1.72	0.43	23.04	1.17	1.16	1.19
1000	4.49	2.36	2.13	0.54	22.34	1.18	1.17	1.20
1050	4.74	2.23	2.52	0.69	21.69	1.19	1.18	1.21
1100	5.00	2.11	2.88	0.87	21.06	1.20	1.19	1.22
1150	5.24	2.01	3.23	1.03	20.50	1.21	1.20	1.23
1200	5.48	1.93	3.55	1.25	19.97	1.23	1.21	1.24
1250	5.71	1.84	3.87	1.47	19.46	1.24	1.23	1.25
1300	5.94	1.78	4.17	1.68	18.98	1.26	1.24	1.26
1350	6.16	1.72	4.44	1.96	18.55	1.27	1.26	1.27
1400	6.38	1.67	4.71	2.23	18.14	1.28	1.28	1.28
1450	6.59	1.63	4.96	2.51	17.76	1.30	1.30	1.30
1500	6.79	1.58	5.21	2.82	17.41	1.32	1.32	1.31
1600	7.19	1.52	5.67	3.53	16.75	1.35	1.37	1.34
1700	7.58	1.48	6.10	4.33	16.17	1.39	1.42	1.38
1800	7.95	1.47	6.48	5.26	15.64	1.44	1.48	1.42

¹ Total Loss = Insertion Loss+3dB Splitter Loss

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