

# 2 Way-90° Power Splitter/Combiner

# HPQ-08+

## 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
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

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

REV. X2  
HPQ-08+  
100914  
Page 1 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED • RoHS compliant  
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661



The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



# 2 Way-90° Power Splitter/Combiner

# HPQ-08+

## 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
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

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

REV. X2  
HPQ-08+  
100914  
Page 2 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED • RoHS compliant  
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661



The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



# 2 Way-90° Power Splitter/Combiner

# HPQ-08+

## 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
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

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

REV. X2  
HPQ-08+  
100914  
Page 3 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED RoHS compliant  
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661



The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see

