

2 Way-90° Power Splitter/Combiner

QCN-45D+

Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
2000	2.47	4.78	2.30	86.91	16.76	1.33	1.37	1.39
2100	2.59	4.55	1.97	87.26	17.03	1.30	1.34	1.36
2200	2.70	4.34	1.65	87.62	17.30	1.27	1.31	1.33
2300	2.81	4.15	1.34	87.88	17.64	1.24	1.27	1.30
2400	2.93	3.98	1.05	88.14	17.98	1.22	1.24	1.28
2450	2.98	3.90	0.92	88.29	18.15	1.21	1.22	1.27
2500	3.04	3.82	0.78	88.41	18.35	1.20	1.21	1.26
2550	3.09	3.75	0.66	88.53	18.50	1.19	1.19	1.25
2600	3.14	3.68	0.54	88.69	18.66	1.19	1.18	1.24
2650	3.19	3.61	0.42	88.83	18.80	1.18	1.17	1.23
2700	3.25	3.55	0.30	88.96	18.90	1.18	1.15	1.22
2750	3.30	3.49	0.19	89.10	19.01	1.18	1.14	1.21
2800	3.36	3.44	0.09	89.21	19.11	1.18	1.13	1.20
2900	3.46	3.35	0.11	89.40	19.15	1.19	1.11	1.18
3000	3.55	3.27	0.28	89.60	19.20	1.20	1.09	1.18
3100	3.64	3.20	0.44	89.79	19.20	1.22	1.08	1.17
3200	3.72	3.14	0.57	89.97	19.10	1.22	1.08	1.16
3250	3.75	3.12	0.63	90.06	19.01	1.23	1.07	1.14
3300	3.79	3.09	0.70	90.14	18.93	1.24	1.08	1.13
3350	3.83	3.08	0.75	90.22	18.85	1.24	1.08	1.13
3400	3.86	3.06	0.80	90.28	18.69	1.25	1.08	1.12
3450	3.90	3.05	0.85	90.33	18.60	1.26	1.09	1.12
3500	3.93	3.03	0.90	90.38	18.48	1.27	1.09	1.11
3550	3.96	3.02	0.94	90.43	18.29	1.28	1.09	1.11
3600	3.99	3.02	0.97	90.47	18.13	1.29	1.10	1.12
3650	4.02	3.01	1.01	90.50	17.99	1.30	1.10	1.12
3700	4.04	3.01	1.04	90.55	17.78	1.31	1.10	1.12
3750	4.06	3.00	1.06	90.60	17.63	1.32	1.10	1.12
3800	4.09	3.00	1.09	90.65	17.47	1.32	1.11	1.12
3900	4.12	3.00	1.13	90.75	17.11	1.33	1.11	1.12
4000	4.15	3.00	1.15	90.87	16.86	1.33	1.12	1.12
4100	4.16	3.00	1.16	90.98	16.63	1.34	1.12	1.13
4200	4.17	3.02	1.15	91.08	16.38	1.35	1.12	1.13
4250	4.17	3.03	1.14	91.14	16.31	1.35	1.13	1.14
4300	4.17	3.05	1.13	91.21	16.23	1.35	1.13	1.14
4450	4.14	3.10	1.04	91.41	16.04	1.36	1.13	1.14
4500	4.13	3.12	1.01	91.48	16.03	1.36	1.13	1.13
4550	4.11	3.14	0.97	91.54	16.01	1.36	1.13	1.13
4600	4.10	3.17	0.92	91.64	16.02	1.35	1.12	1.13
4700	4.06	3.22	0.83	91.73	16.13	1.35	1.13	1.13
4800	3.99	3.29	0.71	91.82	16.22	1.33	1.13	1.12
4900	3.91	3.35	0.56	91.88	16.30	1.31	1.13	1.10
5000	3.82	3.44	0.38	92.09	16.43	1.30	1.12	1.08

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss

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2 Way-90° Power Splitter/Combiner

QCN-45D+

Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = -55°C

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
2000	2.35	4.69	2.34	86.75	16.63	1.34	1.37	1.39
2100	2.46	4.47	2.00	87.05	16.91	1.31	1.35	1.36
2200	2.57	4.25	1.68	87.37	17.24	1.28	1.33	1.33
2300	2.68	4.05	1.38	87.59	17.64	1.25	1.29	1.31
2400	2.79	3.88	1.09	87.85	17.95	1.23	1.25	1.29
2450	2.84	3.80	0.96	88.00	18.09	1.22	1.23	1.28
2500	2.89	3.72	0.83	88.12	18.27	1.21	1.22	1.27
2550	2.94	3.64	0.70	88.24	18.42	1.20	1.20	1.27
2600	2.99	3.57	0.58	88.41	18.61	1.19	1.18	1.25
2650	3.04	3.50	0.46	88.55	18.77	1.18	1.17	1.24
2700	3.10	3.43	0.34	88.67	18.90	1.17	1.16	1.23
2750	3.14	3.37	0.23	88.82	19.03	1.17	1.14	1.22
2800	3.20	3.31	0.11	88.91	19.14	1.17	1.14	1.20
2900	3.30	3.22	0.09	89.06	19.20	1.18	1.12	1.19
3000	3.39	3.14	0.26	89.22	19.19	1.20	1.10	1.19
3100	3.48	3.06	0.42	89.38	19.08	1.22	1.09	1.18
3200	3.56	3.00	0.55	89.56	19.03	1.23	1.08	1.16
3250	3.59	2.98	0.62	89.64	18.97	1.23	1.07	1.15
3300	3.63	2.95	0.68	89.71	18.88	1.25	1.07	1.14
3350	3.67	2.94	0.73	89.80	18.76	1.26	1.07	1.14
3400	3.70	2.91	0.79	89.86	18.55	1.27	1.07	1.13
3450	3.74	2.90	0.84	89.90	18.45	1.28	1.07	1.13
3500	3.77	2.88	0.89	89.95	18.34	1.29	1.08	1.12
3550	3.80	2.87	0.93	89.98	18.19	1.29	1.08	1.12
3600	3.83	2.86	0.97	90.02	18.06	1.30	1.09	1.13
3650	3.86	2.85	1.00	90.04	17.94	1.31	1.09	1.13
3700	3.88	2.84	1.04	90.08	17.73	1.32	1.09	1.13
3750	3.90	2.84	1.06	90.13	17.55	1.33	1.10	1.13
3800	3.92	2.83	1.09	90.18	17.36	1.33	1.10	1.13
3900	3.96	2.83	1.13	90.28	16.95	1.35	1.10	1.13
4000	3.99	2.82	1.17	90.37	16.70	1.35	1.12	1.13
4100	4.00	2.82	1.18	90.45	16.49	1.35	1.12	1.14
4200	4.02	2.83	1.18	90.54	16.20	1.36	1.13	1.15
4250	4.02	2.84	1.18	90.58	16.11	1.37	1.13	1.15
4300	4.02	2.85	1.17	90.60	16.00	1.37	1.13	1.15
4450	3.99	2.89	1.10	90.74	15.70	1.38	1.14	1.15
4500	3.98	2.91	1.07	90.78	15.68	1.38	1.14	1.15
4550	3.96	2.93	1.03	90.84	15.65	1.38	1.14	1.15
4600	3.95	2.96	0.99	90.90	15.67	1.38	1.14	1.14
4700	3.91	3.00	0.91	90.96	15.79	1.37	1.14	1.14
4800	3.84	3.05	0.78	91.00	15.89	1.35	1.14	1.13
4900	3.76	3.11	0.64	91.04	15.94	1.33	1.14	1.11
5000	3.66	3.20	0.47	91.23	16.05	1.32	1.14	1.09

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss

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Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +100°C

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB) 1-2	VSWR (:1)		
	S-1	S-2				S	1	2
2000	2.57	4.82	2.25	86.89	16.73	1.31	1.35	1.38
2100	2.69	4.60	1.91	87.23	16.96	1.28	1.32	1.35
2200	2.81	4.39	1.59	87.59	17.18	1.26	1.29	1.32
2300	2.93	4.21	1.28	87.85	17.46	1.24	1.26	1.29
2400	3.04	4.04	1.00	88.09	17.77	1.22	1.24	1.26
2450	3.10	3.97	0.86	88.24	17.92	1.21	1.22	1.26
2500	3.16	3.89	0.73	88.35	18.11	1.20	1.21	1.25
2550	3.21	3.83	0.61	88.46	18.25	1.19	1.19	1.25
2600	3.26	3.76	0.50	88.63	18.39	1.19	1.18	1.24
2650	3.32	3.70	0.38	88.76	18.50	1.18	1.17	1.23
2700	3.38	3.64	0.26	88.89	18.59	1.18	1.15	1.22
2750	3.42	3.59	0.16	89.03	18.70	1.18	1.14	1.21
2800	3.48	3.54	0.06	89.15	18.79	1.19	1.13	1.20
2900	3.58	3.45	0.13	89.35	18.86	1.20	1.11	1.19
3000	3.67	3.38	0.30	89.60	18.97	1.21	1.09	1.18
3100	3.76	3.31	0.45	89.81	19.04	1.22	1.08	1.17
3200	3.84	3.26	0.59	89.99	19.00	1.23	1.08	1.16
3250	3.88	3.23	0.64	90.07	18.94	1.23	1.08	1.15
3300	3.92	3.21	0.70	90.16	18.89	1.24	1.08	1.14
3350	3.95	3.20	0.75	90.24	18.83	1.25	1.08	1.13
3400	3.98	3.18	0.80	90.31	18.72	1.25	1.08	1.13
3450	4.02	3.17	0.85	90.36	18.67	1.26	1.08	1.12
3500	4.05	3.16	0.89	90.43	18.57	1.27	1.09	1.12
3550	4.08	3.15	0.93	90.49	18.42	1.28	1.09	1.11
3600	4.10	3.14	0.96	90.55	18.28	1.28	1.09	1.11
3650	4.13	3.14	0.99	90.61	18.16	1.29	1.09	1.11
3700	4.16	3.14	1.02	90.67	17.97	1.30	1.09	1.11
3750	4.18	3.14	1.04	90.74	17.82	1.31	1.09	1.11
3800	4.20	3.14	1.07	90.80	17.65	1.32	1.10	1.11
3900	4.24	3.14	1.10	90.92	17.29	1.33	1.10	1.12
4000	4.26	3.14	1.12	91.05	17.03	1.33	1.11	1.12
4100	4.28	3.16	1.13	91.17	16.79	1.34	1.12	1.12
4200	4.28	3.18	1.11	91.32	16.58	1.34	1.12	1.12
4250	4.29	3.19	1.09	91.40	16.54	1.34	1.12	1.13
4300	4.28	3.21	1.08	91.47	16.50	1.34	1.12	1.13
4450	4.25	3.26	0.98	91.69	16.42	1.34	1.12	1.13
4500	4.24	3.29	0.95	91.78	16.43	1.33	1.12	1.12
4550	4.22	3.31	0.91	91.87	16.41	1.33	1.12	1.12
4600	4.20	3.35	0.86	91.97	16.41	1.33	1.12	1.12
4700	4.16	3.40	0.76	92.08	16.53	1.32	1.12	1.11
4800	4.10	3.47	0.63	92.21	16.66	1.30	1.12	1.10
4900	4.02	3.55	0.47	92.33	16.75	1.28	1.12	1.08
5000	3.94	3.65	0.29	92.55	16.88	1.27	1.11	1.07

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss



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