

# 2 Way-90° Power Splitter/Combiner

# QCN-12A+

## 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
400	1.45	6.50	5.05	2.33	19.05	1.21	1.21	1.14
420	1.55	6.22	4.68	2.38	18.83	1.22	1.21	1.14
440	1.65	5.97	4.32	2.43	18.65	1.22	1.22	1.14
460	1.74	5.73	3.99	2.47	18.47	1.22	1.22	1.14
480	1.84	5.51	3.67	2.50	18.32	1.23	1.23	1.14
500	1.94	5.31	3.37	2.54	18.20	1.23	1.23	1.14
525	2.06	5.08	3.02	2.57	18.05	1.24	1.23	1.14
550	2.17	4.86	2.69	2.62	17.92	1.24	1.23	1.14
560	2.22	4.78	2.57	2.62	17.88	1.24	1.23	1.14
570	2.26	4.71	2.44	2.63	17.84	1.24	1.23	1.14
580	2.31	4.64	2.33	2.66	17.79	1.24	1.23	1.14
600	2.40	4.50	2.10	2.67	17.71	1.25	1.23	1.14
650	2.61	4.19	1.58	2.68	17.52	1.25	1.23	1.13
700	2.80	3.92	1.12	2.71	17.36	1.25	1.23	1.12
725	2.90	3.81	0.92	2.69	17.30	1.25	1.23	1.12
750	2.98	3.71	0.73	2.66	17.23	1.25	1.23	1.11
775	3.07	3.61	0.55	2.65	17.17	1.25	1.22	1.11
780	3.08	3.60	0.51	2.65	17.16	1.25	1.22	1.10
790	3.11	3.56	0.45	2.63	17.13	1.25	1.22	1.10
800	3.14	3.53	0.38	2.61	17.10	1.26	1.22	1.10
850	3.29	3.38	0.09	2.54	16.97	1.26	1.21	1.09
900	3.41	3.27	-0.14	2.45	16.82	1.26	1.20	1.07
950	3.51	3.17	-0.34	2.35	16.64	1.26	1.19	1.06
1000	3.59	3.11	-0.48	2.18	16.45	1.27	1.17	1.05
1050	3.65	3.07	-0.58	1.99	16.18	1.27	1.16	1.04
1100	3.68	3.06	-0.62	1.73	15.91	1.28	1.14	1.03
1150	3.69	3.07	-0.62	1.40	15.61	1.29	1.12	1.04
1200	3.67	3.11	-0.56	1.03	15.24	1.30	1.09	1.05
1250	3.63	3.18	-0.45	0.51	14.86	1.31	1.07	1.08
1300	3.57	3.28	-0.29	0.08	14.42	1.33	1.05	1.11
1350	3.48	3.42	-0.06	0.85	13.95	1.35	1.05	1.14
1375	3.43	3.51	0.08	1.34	13.70	1.37	1.06	1.16
1400	3.37	3.61	0.24	1.89	13.44	1.38	1.08	1.19
1450	3.25	3.85	0.61	3.21	12.89	1.41	1.14	1.24
1500	3.11	4.17	1.06	4.93	12.33	1.46	1.21	1.30
1550	2.97	4.56	1.59	7.20	11.73	1.51	1.29	1.38
1600	2.83	5.03	2.21	10.16	11.14	1.57	1.40	1.47

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



# 2 Way-90° Power Splitter/Combiner

# QCN-12A+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = -55°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
400	1.33	6.45	5.12	2.02	19.01	1.20	1.19	1.13
420	1.42	6.17	4.74	2.04	18.79	1.20	1.19	1.13
440	1.52	5.91	4.38	2.10	18.60	1.21	1.20	1.13
460	1.62	5.67	4.05	2.14	18.40	1.22	1.21	1.13
480	1.72	5.45	3.73	2.20	18.24	1.23	1.22	1.13
500	1.81	5.24	3.43	2.24	18.12	1.23	1.22	1.14
525	1.92	5.00	3.08	2.26	17.95	1.23	1.22	1.14
550	2.04	4.78	2.75	2.30	17.79	1.24	1.22	1.14
560	2.08	4.70	2.62	2.31	17.74	1.24	1.23	1.14
570	2.13	4.62	2.50	2.31	17.69	1.24	1.23	1.14
580	2.17	4.55	2.38	2.35	17.64	1.25	1.23	1.14
600	2.26	4.41	2.15	2.37	17.58	1.25	1.24	1.14
650	2.47	4.09	1.63	2.39	17.37	1.26	1.23	1.13
700	2.66	3.82	1.16	2.40	17.16	1.26	1.24	1.13
725	2.75	3.70	0.95	2.41	17.13	1.26	1.24	1.12
750	2.84	3.60	0.76	2.42	17.06	1.27	1.24	1.12
775	2.92	3.50	0.58	2.41	16.95	1.27	1.23	1.12
780	2.94	3.48	0.54	2.41	16.93	1.26	1.23	1.11
790	2.96	3.44	0.48	2.40	16.88	1.26	1.23	1.11
800	2.99	3.41	0.41	2.39	16.83	1.26	1.23	1.11
850	3.14	3.26	0.12	2.30	16.71	1.27	1.23	1.10
900	3.26	3.13	-0.13	2.25	16.53	1.28	1.22	1.09
950	3.36	3.03	-0.32	2.21	16.29	1.28	1.21	1.08
1000	3.44	2.97	-0.47	2.06	16.14	1.30	1.19	1.06
1050	3.49	2.92	-0.57	1.89	15.84	1.29	1.18	1.05
1100	3.52	2.89	-0.63	1.71	15.65	1.30	1.17	1.05
1150	3.52	2.90	-0.63	1.41	15.32	1.31	1.14	1.04
1200	3.51	2.93	-0.58	1.07	14.92	1.33	1.12	1.05
1250	3.46	2.99	-0.47	0.64	14.69	1.33	1.09	1.07
1300	3.39	3.07	-0.32	0.09	14.32	1.34	1.05	1.10
1350	3.29	3.20	-0.09	0.66	13.97	1.36	1.03	1.13
1375	3.24	3.28	0.04	1.09	13.76	1.37	1.04	1.16
1400	3.18	3.37	0.19	1.59	13.50	1.38	1.06	1.18
1450	3.05	3.60	0.55	2.77	12.98	1.42	1.11	1.23
1500	2.89	3.89	1.00	4.35	12.51	1.45	1.18	1.30
1550	2.73	4.26	1.53	6.47	11.95	1.50	1.28	1.38
1600	2.58	4.71	2.14	9.17	11.40	1.55	1.40	1.49

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

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# 2 Way-90° Power Splitter/Combiner

# QCN-12A+

## Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +100°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
400	1.52	6.50	4.98	2.90	19.01	1.23	1.24	1.17
420	1.63	6.23	4.61	3.00	18.74	1.24	1.25	1.17
440	1.73	5.99	4.26	3.07	18.54	1.25	1.26	1.17
460	1.82	5.76	3.93	3.11	18.42	1.25	1.26	1.17
480	1.91	5.54	3.62	3.12	18.36	1.24	1.25	1.17
500	2.01	5.33	3.33	3.11	18.31	1.24	1.25	1.17
525	2.13	5.10	2.98	3.16	18.19	1.24	1.25	1.16
550	2.25	4.90	2.65	3.23	18.04	1.25	1.26	1.16
560	2.29	4.82	2.53	3.25	18.00	1.25	1.26	1.16
570	2.34	4.74	2.40	3.24	17.98	1.25	1.26	1.16
580	2.38	4.67	2.29	3.24	17.97	1.25	1.25	1.16
600	2.46	4.53	2.07	3.25	17.95	1.24	1.25	1.15
650	2.67	4.22	1.55	3.25	17.86	1.24	1.24	1.14
700	2.87	3.96	1.10	3.27	17.73	1.24	1.23	1.13
725	2.95	3.85	0.90	3.25	17.73	1.24	1.23	1.12
750	3.04	3.74	0.70	3.22	17.71	1.23	1.22	1.11
775	3.12	3.65	0.53	3.21	17.67	1.23	1.21	1.11
780	3.14	3.64	0.50	3.20	17.66	1.23	1.21	1.10
790	3.17	3.60	0.43	3.20	17.63	1.23	1.21	1.10
800	3.20	3.57	0.37	3.18	17.60	1.23	1.21	1.10
850	3.34	3.42	0.08	3.11	17.47	1.23	1.19	1.08
900	3.46	3.31	-0.15	3.00	17.34	1.23	1.17	1.07
950	3.56	3.22	-0.34	2.89	17.14	1.24	1.16	1.05
1000	3.64	3.16	-0.48	2.75	16.93	1.24	1.14	1.05
1050	3.70	3.13	-0.57	2.55	16.61	1.24	1.12	1.04
1100	3.74	3.13	-0.61	2.27	16.28	1.26	1.10	1.05
1150	3.75	3.14	-0.60	1.94	15.92	1.26	1.08	1.06
1200	3.74	3.19	-0.54	1.51	15.48	1.28	1.06	1.08
1250	3.70	3.27	-0.43	0.94	15.01	1.30	1.05	1.11
1300	3.64	3.39	-0.26	0.26	14.48	1.32	1.06	1.14
1350	3.56	3.54	-0.02	0.60	13.91	1.35	1.09	1.17
1375	3.51	3.64	0.12	1.11	13.63	1.36	1.11	1.19
1400	3.46	3.75	0.28	1.69	13.34	1.38	1.13	1.22
1450	3.35	4.00	0.66	3.12	12.75	1.42	1.19	1.26
1500	3.22	4.33	1.11	4.97	12.12	1.47	1.26	1.32
1550	3.09	4.74	1.64	7.40	11.50	1.53	1.34	1.39
1600	2.97	5.22	2.25	10.61	10.89	1.59	1.45	1.47

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

