

2 Way-90° Power Splitter/Combiner

QCN-19D+

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
500	7.00	1.29	5.71	88.20	22.13	1.16	1.16	1.16
525	6.71	1.38	5.33	88.17	21.99	1.16	1.16	1.17
550	6.44	1.46	4.98	88.16	21.88	1.16	1.16	1.17
560	6.34	1.50	4.84	88.15	21.84	1.17	1.17	1.17
570	6.24	1.53	4.71	88.18	21.82	1.17	1.17	1.17
580	6.15	1.57	4.58	88.19	21.79	1.17	1.17	1.17
600	5.96	1.64	4.32	88.23	21.75	1.17	1.17	1.17
650	5.55	1.81	3.73	88.23	21.64	1.17	1.17	1.17
700	5.19	1.98	3.20	88.29	21.64	1.17	1.16	1.17
750	4.87	2.15	2.72	88.33	21.76	1.16	1.16	1.17
800	4.59	2.31	2.29	88.40	21.91	1.16	1.15	1.16
850	4.35	2.46	1.89	88.48	22.15	1.15	1.15	1.16
900	4.14	2.61	1.54	88.54	22.48	1.15	1.14	1.15
950	3.95	2.74	1.21	88.66	22.84	1.14	1.13	1.14
1000	3.79	2.87	0.92	88.73	23.23	1.13	1.12	1.14
1050	3.65	2.99	0.66	88.82	23.66	1.12	1.11	1.13
1100	3.52	3.10	0.42	88.91	24.20	1.12	1.10	1.12
1150	3.42	3.20	0.22	88.99	24.82	1.11	1.09	1.12
1200	3.33	3.29	0.03	89.09	25.47	1.10	1.08	1.11
1250	3.25	3.37	0.12	89.20	26.25	1.09	1.07	1.10
1300	3.19	3.44	0.25	89.29	27.14	1.07	1.06	1.09
1350	3.14	3.50	0.36	89.38	28.13	1.06	1.05	1.08
1400	3.10	3.55	0.44	89.45	29.22	1.05	1.04	1.07
1450	3.08	3.58	0.50	89.54	30.47	1.04	1.03	1.06
1500	3.07	3.60	0.53	89.64	31.97	1.03	1.02	1.05
1550	3.08	3.62	0.54	89.74	33.67	1.02	1.01	1.04
1600	3.09	3.62	0.52	89.82	35.74	1.01	1.01	1.04
1650	3.12	3.60	0.48	89.90	38.42	1.00	1.01	1.03
1700	3.17	3.57	0.40	90.00	40.92	1.01	1.02	1.02
1750	3.23	3.53	0.30	90.08	41.89	1.02	1.03	1.03
1800	3.30	3.48	0.17	90.21	40.11	1.04	1.04	1.03
1850	3.40	3.41	0.01	90.33	37.73	1.05	1.06	1.04
1900	3.51	3.33	0.18	90.46	35.15	1.07	1.07	1.06
1925	3.58	3.29	0.29	90.55	34.03	1.07	1.08	1.06
1975	3.73	3.19	0.54	90.72	32.40	1.09	1.09	1.08
2000	3.81	3.14	0.67	90.80	31.66	1.10	1.10	1.09
2050	4.00	3.02	0.98	91.01	30.24	1.12	1.11	1.10
2100	4.22	2.90	1.33	91.26	29.06	1.14	1.13	1.12
2150	4.49	2.76	1.72	91.53	28.11	1.16	1.14	1.14
2200	4.79	2.62	2.17	91.87	27.24	1.18	1.16	1.16
2250	5.15	2.47	2.68	92.27	26.47	1.21	1.18	1.18
2300	5.57	2.31	3.25	92.73	25.92	1.23	1.20	1.21
2350	6.06	2.15	3.91	93.29	25.48	1.26	1.22	1.23
2400	6.64	1.99	4.65	93.97	25.26	1.29	1.24	1.26
2450	7.34	1.83	5.51	94.77	25.17	1.31	1.25	1.28
2500	8.18	1.66	6.51	95.79	25.27	1.34	1.27	1.31
2550	9.21	1.51	7.70	97.10	25.61	1.35	1.28	1.33

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss

REV. X2
QCN-19D+
100705
Page 1 of 3

2 Way-90° Power Splitter/Combiner

QCN-19D+

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
500	6.94	1.15	5.79	88.09	22.17	1.15	1.14	1.15
525	6.65	1.23	5.42	88.01	22.05	1.15	1.15	1.15
550	6.38	1.31	5.06	88.00	21.98	1.15	1.15	1.15
560	6.27	1.35	4.92	87.98	21.93	1.15	1.16	1.15
570	6.17	1.38	4.79	88.00	21.88	1.15	1.16	1.15
580	6.07	1.42	4.66	88.00	21.82	1.16	1.16	1.16
600	5.89	1.49	4.40	88.01	21.74	1.16	1.16	1.16
650	5.46	1.65	3.81	87.94	21.56	1.17	1.16	1.17
700	5.09	1.82	3.27	87.94	21.59	1.16	1.17	1.16
750	4.76	1.98	2.78	87.96	21.65	1.16	1.16	1.17
800	4.48	2.13	2.35	87.92	21.69	1.16	1.16	1.17
850	4.23	2.28	1.95	87.96	21.90	1.16	1.16	1.16
900	4.01	2.42	1.59	87.96	22.12	1.16	1.15	1.17
950	3.82	2.55	1.27	87.97	22.37	1.15	1.15	1.16
1000	3.65	2.68	0.97	88.06	22.65	1.15	1.14	1.15
1050	3.50	2.80	0.71	88.07	22.95	1.14	1.12	1.16
1100	3.37	2.89	0.48	88.12	23.49	1.13	1.13	1.15
1150	3.26	2.99	0.26	88.17	23.92	1.12	1.11	1.14
1200	3.16	3.08	0.08	88.20	24.16	1.12	1.10	1.14
1250	3.08	3.16	0.08	88.27	24.80	1.11	1.10	1.13
1300	3.01	3.22	0.21	88.34	25.68	1.10	1.08	1.12
1350	2.95	3.28	0.32	88.44	26.70	1.08	1.07	1.11
1400	2.91	3.32	0.41	88.47	27.76	1.08	1.06	1.10
1450	2.87	3.36	0.48	88.53	28.71	1.07	1.05	1.10
1500	2.86	3.38	0.52	88.61	30.27	1.06	1.04	1.09
1550	2.85	3.39	0.54	88.67	32.11	1.05	1.03	1.08
1600	2.86	3.39	0.53	88.72	34.61	1.04	1.04	1.08
1650	2.87	3.37	0.50	88.75	37.93	1.03	1.03	1.08
1700	2.90	3.35	0.44	88.78	40.14	1.03	1.04	1.07
1750	2.95	3.31	0.35	88.79	40.14	1.03	1.05	1.08
1800	3.02	3.25	0.24	88.83	36.93	1.04	1.07	1.08
1850	3.10	3.19	0.09	88.85	33.96	1.06	1.08	1.09
1900	3.20	3.11	0.09	88.88	31.71	1.07	1.10	1.10
1925	3.26	3.07	0.19	88.93	30.37	1.08	1.10	1.11
1975	3.40	2.97	0.42	89.01	28.44	1.11	1.12	1.13
2000	3.48	2.92	0.55	89.04	27.87	1.12	1.12	1.14
2050	3.66	2.81	0.85	89.17	26.83	1.14	1.15	1.16
2100	3.87	2.68	1.19	89.31	25.46	1.17	1.17	1.18
2150	4.12	2.55	1.57	89.56	24.45	1.21	1.19	1.22
2200	4.41	2.41	2.00	89.86	23.87	1.25	1.22	1.25
2250	4.75	2.26	2.49	90.20	23.16	1.28	1.25	1.29
2300	5.14	2.11	3.03	90.64	22.48	1.32	1.28	1.31
2350	5.60	1.96	3.64	91.20	22.12	1.36	1.30	1.36
2400	6.13	1.80	4.33	91.86	21.93	1.40	1.33	1.39
2450	6.75	1.63	5.12	92.56	21.85	1.43	1.35	1.42
2500	7.48	1.47	6.01	93.40	22.02	1.45	1.35	1.44
2550	8.38	1.31	7.07	94.42	22.33	1.48	1.35	1.46

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss

REV. X2
QCN-19D+
100705
Page 2 of 3

2 Way-90° Power Splitter/Combiner

QCN-19D+

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
500	7.01	1.37	5.64	88.13	21.99	1.19	1.19	1.19
525	6.72	1.46	5.27	88.16	21.86	1.19	1.19	1.19
550	6.46	1.55	4.91	88.20	21.72	1.19	1.19	1.20
560	6.36	1.58	4.78	88.18	21.69	1.19	1.19	1.20
570	6.26	1.62	4.64	88.21	21.66	1.19	1.19	1.20
580	6.17	1.65	4.51	88.23	21.64	1.19	1.19	1.20
600	5.99	1.73	4.26	88.29	21.67	1.19	1.19	1.20
650	5.58	1.90	3.68	88.40	21.69	1.18	1.18	1.19
700	5.22	2.07	3.15	88.52	21.78	1.18	1.17	1.19
750	4.90	2.23	2.67	88.63	22.12	1.17	1.17	1.17
800	4.63	2.39	2.24	88.79	22.44	1.16	1.15	1.16
850	4.39	2.55	1.84	88.92	22.83	1.15	1.14	1.15
900	4.18	2.70	1.48	89.02	23.31	1.14	1.13	1.14
950	3.99	2.83	1.16	89.16	23.83	1.13	1.12	1.13
1000	3.83	2.96	0.87	89.27	24.41	1.12	1.10	1.12
1050	3.69	3.08	0.61	89.41	25.00	1.10	1.09	1.10
1100	3.57	3.20	0.37	89.56	25.69	1.09	1.08	1.09
1150	3.47	3.30	0.17	89.65	26.52	1.08	1.07	1.08
1200	3.38	3.39	0.01	89.77	27.38	1.07	1.05	1.07
1250	3.31	3.48	0.17	89.89	28.29	1.06	1.04	1.06
1300	3.26	3.55	0.29	89.99	29.19	1.05	1.03	1.05
1350	3.22	3.61	0.39	90.14	30.01	1.04	1.02	1.04
1400	3.19	3.66	0.47	90.19	30.84	1.03	1.02	1.02
1450	3.17	3.69	0.52	90.29	31.64	1.03	1.02	1.01
1500	3.18	3.72	0.54	90.42	32.22	1.03	1.02	1.00
1550	3.19	3.73	0.54	90.56	32.37	1.03	1.03	1.01
1600	3.21	3.73	0.51	90.69	32.34	1.04	1.03	1.02
1650	3.25	3.71	0.46	90.81	31.85	1.05	1.04	1.03
1700	3.31	3.68	0.37	90.95	31.16	1.06	1.05	1.05
1750	3.38	3.64	0.26	91.10	30.46	1.06	1.06	1.06
1800	3.47	3.59	0.12	91.30	29.85	1.07	1.06	1.07
1850	3.57	3.52	0.05	91.51	29.32	1.08	1.07	1.08
1900	3.69	3.44	0.25	91.66	28.73	1.09	1.07	1.09
1925	3.76	3.40	0.37	91.77	28.59	1.10	1.08	1.09
1975	3.92	3.30	0.62	91.97	28.16	1.10	1.08	1.10
2000	4.01	3.24	0.76	92.07	27.95	1.11	1.08	1.11
2050	4.21	3.12	1.09	92.34	27.69	1.11	1.09	1.11
2100	4.44	2.99	1.45	92.61	27.48	1.12	1.09	1.11
2150	4.72	2.85	1.87	92.93	27.39	1.13	1.10	1.12
2200	5.04	2.70	2.34	93.30	27.33	1.13	1.10	1.11
2250	5.42	2.54	2.88	93.74	27.32	1.14	1.10	1.11
2300	5.86	2.37	3.49	94.25	27.55	1.14	1.11	1.11
2350	6.40	2.20	4.19	94.85	27.97	1.15	1.11	1.11
2400	7.04	2.03	5.01	95.59	28.46	1.15	1.11	1.11
2450	7.81	1.86	5.95	96.53	29.07	1.16	1.12	1.11
2500	8.76	1.70	7.06	97.77	29.73	1.17	1.13	1.11
2550	9.94	1.55	8.39	99.53	30.63	1.17	1.14	1.12

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss

REV. X2
QCN-19D+
100705
Page 3 of 3