

2 Way-90° Power Splitter/Combiner

QCN-27

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
900	1.61	6.19	4.58	3.15	18.98	1.27	1.26	1.27
950	1.72	5.91	4.19	3.15	18.95	1.27	1.27	1.27
1000	1.82	5.66	3.83	3.12	19.00	1.27	1.27	1.27
1100	2.03	5.21	3.18	3.04	19.16	1.27	1.26	1.26
1150	2.13	5.01	2.88	2.97	19.31	1.26	1.26	1.26
1200	2.23	4.82	2.60	2.90	19.48	1.26	1.26	1.25
1250	2.32	4.66	2.34	2.82	19.67	1.25	1.25	1.24
1300	2.41	4.50	2.09	2.74	19.92	1.24	1.25	1.24
1350	2.50	4.36	1.86	2.68	20.15	1.23	1.24	1.23
1400	2.58	4.23	1.65	2.60	20.45	1.23	1.23	1.22
1450	2.66	4.11	1.44	2.53	20.76	1.22	1.22	1.21
1500	2.74	4.00	1.26	2.46	21.04	1.21	1.22	1.20
1600	2.89	3.80	0.91	2.31	21.79	1.19	1.20	1.18
1650	2.95	3.71	0.76	2.30	22.22	1.18	1.19	1.17
1700	3.02	3.64	0.62	2.22	22.68	1.17	1.18	1.16
1750	3.08	3.57	0.49	2.17	23.14	1.16	1.17	1.15
1800	3.13	3.50	0.37	2.14	23.66	1.16	1.16	1.13
1850	3.18	3.45	0.27	2.09	24.23	1.15	1.15	1.12
1900	3.22	3.40	0.17	2.05	24.83	1.14	1.14	1.11
1950	3.26	3.36	0.09	2.01	25.54	1.13	1.13	1.11
2000	3.30	3.32	0.03	1.99	26.30	1.12	1.12	1.10
2050	3.33	3.29	0.03	1.96	27.01	1.11	1.11	1.09
2100	3.36	3.27	0.08	1.95	28.02	1.10	1.10	1.08
2150	3.38	3.26	0.12	1.94	28.99	1.09	1.10	1.07
2200	3.39	3.25	0.15	1.92	30.19	1.08	1.09	1.07
2300	3.41	3.25	0.16	1.88	33.06	1.07	1.07	1.06
2350	3.41	3.26	0.15	1.86	34.91	1.06	1.06	1.06
2400	3.40	3.27	0.13	1.84	37.08	1.05	1.06	1.06
2450	3.39	3.29	0.09	1.84	39.58	1.05	1.05	1.07
2500	3.37	3.32	0.05	1.83	41.74	1.04	1.04	1.07
2550	3.35	3.36	0.01	1.81	41.44	1.04	1.03	1.08
2600	3.32	3.40	0.09	1.81	39.51	1.04	1.03	1.08
2650	3.28	3.46	0.17	1.74	36.98	1.04	1.03	1.09
2700	3.24	3.52	0.27	1.69	35.03	1.04	1.03	1.10
2750	3.20	3.58	0.38	1.65	33.34	1.04	1.03	1.11
2800	3.15	3.66	0.51	1.60	31.80	1.05	1.04	1.12
2850	3.09	3.74	0.65	1.56	30.83	1.06	1.05	1.13
2900	3.03	3.84	0.81	1.46	29.72	1.07	1.06	1.14
3000	2.89	4.06	1.17	1.26	28.19	1.10	1.08	1.17
3050	2.82	4.19	1.37	1.11	27.45	1.11	1.09	1.17
3100	2.74	4.34	1.59	0.99	26.70	1.12	1.10	1.19
3150	2.66	4.50	1.84	0.83	26.11	1.14	1.12	1.20
3200	2.58	4.67	2.09	0.66	25.49	1.15	1.13	1.22
3250	2.49	4.86	2.37	0.45	24.93	1.17	1.15	1.23
3300	2.40	5.07	2.67	0.20	24.43	1.18	1.16	1.24
3350	2.31	5.30	2.99	0.06	23.93	1.20	1.18	1.26
3400	2.22	5.56	3.34	0.34	23.53	1.22	1.19	1.27
3450	2.12	5.84	3.71	0.67	23.11	1.23	1.21	1.29
3500	2.03	6.15	4.11	1.01	22.70	1.25	1.23	1.30
3550	1.94	6.49	4.55	1.42	22.38	1.27	1.25	1.32
3600	1.85	6.86	5.01	1.91	22.03	1.29	1.27	1.33
3700	1.67	7.73	6.06	3.09	21.45	1.32	1.30	1.37
3750	1.59	8.23	6.65	3.79	21.19	1.34	1.32	1.38
3800	1.50	8.80	7.29	4.59	20.90	1.36	1.34	1.39

¹Total Loss = Insertion Loss+ 3dB Splitter Loss

REV. X2
QCN-27
100627
Page 1 of 3



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2 Way-90° Power Splitter/Combiner

QCN-27

Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS ¹ (dB)		AMP. UNBAL. (dB)	PHASE UNBAL. From 90° (deg.)	ISOLATION (dB)	VSWR (:1)		
	S-1	S-2				S	1	2
900	1.46	6.06	4.60	3.38	18.71	1.27	1.27	1.28
950	1.57	5.78	4.21	3.42	18.65	1.28	1.28	1.28
1000	1.67	5.53	3.85	3.47	18.57	1.28	1.28	1.29
1100	1.87	5.07	3.20	3.54	18.69	1.28	1.29	1.29
1150	1.97	4.88	2.91	3.48	18.72	1.28	1.29	1.29
1200	2.06	4.69	2.63	3.50	18.72	1.29	1.29	1.29
1250	2.15	4.53	2.38	3.48	18.80	1.28	1.29	1.29
1300	2.23	4.38	2.14	3.36	19.01	1.28	1.28	1.28
1350	2.31	4.23	1.92	3.31	19.32	1.27	1.28	1.28
1400	2.39	4.10	1.71	3.19	19.52	1.26	1.26	1.27
1450	2.46	3.97	1.51	3.11	19.77	1.25	1.26	1.26
1500	2.53	3.86	1.33	3.02	20.04	1.24	1.25	1.25
1600	2.66	3.65	0.99	2.79	20.78	1.21	1.23	1.22
1650	2.72	3.55	0.83	2.74	21.27	1.20	1.21	1.20
1700	2.78	3.46	0.68	2.66	21.70	1.19	1.21	1.19
1750	2.83	3.38	0.55	2.56	22.20	1.18	1.19	1.16
1800	2.88	3.31	0.42	2.52	22.74	1.17	1.17	1.14
1850	2.93	3.24	0.31	2.45	23.47	1.15	1.15	1.12
1900	2.97	3.18	0.21	2.43	24.13	1.14	1.13	1.10
1950	3.01	3.12	0.11	2.43	24.89	1.13	1.12	1.08
2000	3.05	3.08	0.04	2.47	26.02	1.12	1.11	1.06
2050	3.08	3.04	0.04	2.48	26.72	1.12	1.10	1.04
2100	3.10	3.01	0.09	2.53	27.76	1.11	1.08	1.02
2150	3.12	2.99	0.14	2.62	29.30	1.10	1.07	1.02
2200	3.14	2.97	0.17	2.69	30.60	1.10	1.06	1.04
2300	3.15	2.96	0.19	2.78	32.50	1.08	1.03	1.08
2350	3.15	2.97	0.17	2.84	32.97	1.08	1.02	1.10
2400	3.13	2.99	0.14	2.93	32.79	1.07	1.01	1.13
2450	3.11	3.01	0.10	2.91	32.10	1.06	1.02	1.15
2500	3.09	3.04	0.05	2.91	30.91	1.05	1.04	1.17
2550	3.07	3.08	0.01	2.91	29.31	1.05	1.05	1.19
2600	3.03	3.13	0.10	2.90	27.79	1.04	1.06	1.21
2650	2.99	3.19	0.19	2.77	27.00	1.04	1.08	1.24
2700	2.96	3.24	0.28	2.64	26.31	1.04	1.09	1.26
2750	2.92	3.32	0.40	2.53	25.24	1.07	1.11	1.28
2800	2.87	3.39	0.52	2.34	24.49	1.08	1.13	1.31
2850	2.82	3.47	0.64	2.20	23.99	1.10	1.14	1.33
2900	2.78	3.55	0.77	2.00	23.63	1.11	1.16	1.34
3000	2.66	3.73	1.07	1.77	23.10	1.14	1.18	1.35
3050	2.60	3.83	1.23	1.63	23.03	1.14	1.18	1.36
3100	2.53	3.94	1.41	1.55	22.86	1.14	1.19	1.35
3150	2.46	4.06	1.61	1.53	22.83	1.14	1.19	1.35
3200	2.36	4.20	1.84	1.63	23.20	1.13	1.17	1.34
3250	2.27	4.37	2.10	1.62	23.15	1.14	1.17	1.34
3300	2.18	4.54	2.36	1.63	23.27	1.12	1.17	1.33
3350	2.07	4.72	2.65	1.65	23.82	1.10	1.17	1.29
3400	1.95	4.94	2.99	1.67	24.30	1.09	1.16	1.27
3450	1.83	5.19	3.36	1.64	24.78	1.08	1.14	1.25
3500	1.71	5.46	3.75	1.54	25.20	1.07	1.13	1.22
3550	1.60	5.77	4.18	1.41	25.87	1.07	1.13	1.19
3600	1.47	6.12	4.65	1.23	26.32	1.09	1.13	1.16
3700	1.25	6.94	5.69	0.62	26.76	1.12	1.12	1.10
3750	1.14	7.42	6.28	0.29	26.48	1.15	1.12	1.06
3800	1.04	7.96	6.92	0.17	25.69	1.18	1.13	1.06

¹Total Loss = Insertion Loss+ 3dB Splitter Loss



2 Way-90° Power Splitter/Combiner

QCN-27

Typical Performance Data

TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +100°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
900	1.67	6.23	4.56	2.83	19.52	1.27	1.26	1.26
950	1.78	5.95	4.17	2.76	19.55	1.26	1.26	1.26
1000	1.89	5.69	3.80	2.69	19.70	1.26	1.25	1.25
1100	2.10	5.23	3.13	2.57	20.02	1.24	1.24	1.22
1150	2.20	5.03	2.83	2.45	20.28	1.23	1.23	1.21
1200	2.30	4.84	2.55	2.36	20.59	1.22	1.22	1.20
1250	2.40	4.67	2.28	2.25	20.87	1.21	1.21	1.19
1300	2.49	4.52	2.02	2.18	21.18	1.20	1.20	1.17
1350	2.58	4.37	1.79	2.13	21.45	1.19	1.19	1.16
1400	2.67	4.25	1.57	2.05	21.84	1.18	1.18	1.15
1450	2.76	4.13	1.36	2.01	22.24	1.17	1.17	1.14
1500	2.84	4.02	1.17	1.96	22.56	1.16	1.16	1.13
1600	3.01	3.83	0.82	1.85	23.46	1.15	1.15	1.12
1650	3.08	3.75	0.67	1.82	23.93	1.14	1.14	1.12
1700	3.15	3.68	0.53	1.79	24.32	1.13	1.13	1.12
1750	3.22	3.62	0.40	1.74	24.62	1.13	1.13	1.13
1800	3.28	3.57	0.29	1.74	24.98	1.13	1.13	1.13
1850	3.33	3.52	0.19	1.73	25.37	1.12	1.13	1.14
1900	3.38	3.49	0.11	1.71	25.66	1.12	1.13	1.15
1950	3.42	3.45	0.03	1.69	25.97	1.12	1.13	1.16
2000	3.46	3.43	0.03	1.70	26.17	1.12	1.13	1.17
2050	3.50	3.41	0.08	1.69	26.28	1.12	1.13	1.17
2100	3.53	3.40	0.12	1.67	26.52	1.12	1.13	1.18
2150	3.55	3.40	0.15	1.65	26.65	1.11	1.13	1.19
2200	3.57	3.40	0.17	1.60	26.87	1.11	1.13	1.19
2300	3.58	3.42	0.16	1.55	27.32	1.10	1.14	1.20
2350	3.58	3.44	0.14	1.49	27.60	1.10	1.13	1.20
2400	3.57	3.46	0.11	1.44	27.97	1.10	1.13	1.20
2450	3.55	3.49	0.06	1.38	28.43	1.09	1.13	1.20
2500	3.53	3.53	0.01	1.30	28.93	1.08	1.12	1.19
2550	3.51	3.57	0.06	1.22	29.31	1.08	1.12	1.18
2600	3.47	3.62	0.14	1.14	29.58	1.07	1.12	1.17
2650	3.43	3.67	0.24	1.02	30.12	1.06	1.11	1.17
2700	3.39	3.73	0.34	0.90	30.73	1.05	1.11	1.16
2750	3.35	3.80	0.46	0.80	31.15	1.05	1.11	1.14
2800	3.30	3.89	0.59	0.65	31.28	1.05	1.10	1.13
2850	3.24	3.97	0.73	0.55	31.21	1.06	1.10	1.11
2900	3.18	4.07	0.89	0.42	31.05	1.07	1.09	1.09
3000	3.04	4.29	1.25	0.22	29.99	1.09	1.07	1.05
3050	2.97	4.42	1.45	0.12	29.25	1.11	1.05	1.04
3100	2.90	4.57	1.67	0.08	28.21	1.13	1.04	1.03
3150	2.82	4.74	1.92	0.00	27.16	1.16	1.02	1.05
3200	2.75	4.94	2.19	0.04	26.10	1.19	1.01	1.09
3250	2.67	5.16	2.49	0.14	25.19	1.21	1.04	1.13
3300	2.58	5.40	2.82	0.20	24.36	1.24	1.07	1.17
3350	2.49	5.68	3.19	0.31	23.49	1.27	1.12	1.22
3400	2.41	6.00	3.59	0.53	22.81	1.31	1.17	1.28
3450	2.32	6.35	4.03	0.84	22.14	1.35	1.22	1.35
3500	2.25	6.76	4.51	1.24	21.49	1.40	1.28	1.42
3550	2.18	7.20	5.01	1.79	20.98	1.46	1.35	1.50
3600	2.11	7.70	5.59	2.58	20.51	1.51	1.41	1.59
3700	2.02	8.81	6.79	4.76	19.97	1.64	1.56	1.77
3750	1.98	9.45	7.47	6.19	19.70	1.70	1.64	1.86
3800	1.95	10.12	8.18	7.76	19.48	1.76	1.71	1.94

¹Total Loss = Insertion Loss+ 3dB Splitter Loss

REV. X2
QCN-27
100627
Page 3 of 3



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