

2 Way-90° Power Splitter/Combiner

QBA-12N

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	AVG.				S	1	2
400	5.31	2.02	3.67	3.29	92.25	20.61	1.27	1.25	1.25
425	5.04	2.16	3.60	2.88	92.12	20.61	1.26	1.24	1.24
450	4.79	2.29	3.54	2.50	91.97	20.63	1.25	1.23	1.23
475	4.57	2.43	3.50	2.14	91.82	20.69	1.24	1.22	1.22
500	4.37	2.56	3.46	1.81	91.68	20.77	1.23	1.21	1.21
525	4.19	2.68	3.43	1.51	91.55	20.89	1.22	1.20	1.20
550	4.03	2.79	3.41	1.24	91.41	21.01	1.21	1.18	1.18
575	3.88	2.90	3.39	0.98	91.29	21.17	1.20	1.17	1.17
600	3.75	3.01	3.38	0.74	91.13	21.34	1.19	1.15	1.16
625	3.64	3.11	3.38	0.52	91.04	21.53	1.18	1.14	1.15
650	3.54	3.20	3.37	0.33	90.91	21.71	1.17	1.13	1.14
675	3.44	3.29	3.37	0.15	90.81	21.91	1.16	1.12	1.13
700	3.36	3.37	3.37	0.01	90.74	22.11	1.16	1.10	1.13
725	3.30	3.44	3.37	0.14	90.64	22.36	1.15	1.10	1.12
750	3.24	3.51	3.37	0.27	90.60	22.60	1.15	1.09	1.12
775	3.20	3.57	3.38	0.37	90.57	22.84	1.14	1.08	1.12
800	3.17	3.62	3.39	0.45	90.49	23.03	1.14	1.08	1.12
825	3.14	3.66	3.40	0.52	90.51	23.24	1.14	1.07	1.13
850	3.13	3.68	3.41	0.55	90.52	23.42	1.14	1.07	1.13
875	3.12	3.71	3.41	0.59	90.54	23.60	1.14	1.08	1.14
900	3.13	3.72	3.43	0.59	90.57	23.77	1.14	1.08	1.14
925	3.14	3.73	3.43	0.59	90.61	23.87	1.15	1.08	1.15
950	3.16	3.72	3.44	0.56	90.65	23.94	1.15	1.09	1.16
975	3.21	3.70	3.45	0.49	90.69	23.95	1.15	1.09	1.16
1000	3.26	3.68	3.47	0.42	90.70	23.93	1.16	1.10	1.17
1025	3.32	3.64	3.48	0.32	90.71	23.87	1.17	1.11	1.18
1050	3.39	3.59	3.49	0.20	90.73	23.79	1.18	1.12	1.19
1075	3.49	3.54	3.51	0.05	90.75	23.62	1.19	1.14	1.20
1100	3.59	3.47	3.53	0.12	90.73	23.44	1.20	1.15	1.21
1125	3.72	3.40	3.56	0.32	90.71	23.20	1.22	1.17	1.23
1150	3.87	3.32	3.59	0.55	90.64	22.92	1.23	1.19	1.24
1175	4.03	3.23	3.63	0.80	90.51	22.62	1.26	1.21	1.26
1200	4.22	3.14	3.68	1.08	90.39	22.31	1.28	1.24	1.28
1225	4.43	3.04	3.74	1.40	90.17	22.00	1.31	1.26	1.31
1250	4.68	2.94	3.81	1.74	89.91	21.70	1.35	1.30	1.34
1275	4.96	2.84	3.90	2.13	89.61	21.38	1.38	1.33	1.38
1300	5.28	2.72	4.00	2.55	89.22	21.08	1.42	1.37	1.41

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss



2 Way-90° Power Splitter/Combiner

QBA-12N

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	AVG.				S	1	2
400	5.22	1.90	3.56	3.32	92.52	20.70	1.27	1.25	1.24
425	4.94	2.03	3.49	2.91	92.43	20.69	1.26	1.24	1.23
450	4.68	2.16	3.42	2.52	92.30	20.78	1.25	1.23	1.22
475	4.46	2.29	3.37	2.17	92.21	20.80	1.24	1.22	1.21
500	4.26	2.42	3.34	1.84	92.11	20.73	1.24	1.21	1.21
525	4.08	2.53	3.31	1.54	91.99	20.82	1.23	1.20	1.20
550	3.91	2.64	3.28	1.27	91.88	21.03	1.21	1.19	1.18
575	3.76	2.75	3.25	1.01	91.78	21.19	1.20	1.18	1.17
600	3.63	2.86	3.24	0.77	91.63	21.27	1.20	1.16	1.17
625	3.51	2.95	3.23	0.55	91.54	21.41	1.19	1.15	1.16
650	3.40	3.04	3.22	0.37	91.47	21.64	1.18	1.14	1.14
675	3.30	3.13	3.22	0.18	91.38	21.85	1.17	1.13	1.13
700	3.22	3.21	3.22	0.01	91.31	22.01	1.17	1.11	1.13
725	3.15	3.28	3.22	0.13	91.26	22.22	1.16	1.10	1.13
750	3.08	3.34	3.21	0.26	91.26	22.44	1.15	1.09	1.13
775	3.03	3.40	3.22	0.37	91.24	22.61	1.14	1.09	1.12
800	3.00	3.45	3.22	0.45	91.20	22.70	1.15	1.08	1.12
825	2.96	3.49	3.23	0.53	91.23	22.89	1.15	1.07	1.12
850	2.94	3.51	3.23	0.57	91.27	23.10	1.14	1.07	1.13
875	2.93	3.54	3.24	0.61	91.35	23.27	1.14	1.08	1.13
900	2.92	3.54	3.23	0.62	91.41	23.34	1.15	1.08	1.13
925	2.93	3.55	3.24	0.62	91.49	23.42	1.15	1.07	1.14
950	2.95	3.54	3.25	0.59	91.53	23.57	1.14	1.08	1.15
975	2.98	3.52	3.25	0.54	91.60	23.61	1.14	1.08	1.16
1000	3.02	3.49	3.26	0.47	91.67	23.52	1.15	1.09	1.16
1025	3.08	3.45	3.26	0.38	91.69	23.36	1.16	1.09	1.16
1050	3.14	3.41	3.28	0.28	91.75	23.24	1.17	1.10	1.17
1075	3.22	3.36	3.29	0.14	91.85	23.10	1.18	1.12	1.18
1100	3.31	3.28	3.30	0.02	91.89	22.95	1.19	1.14	1.19
1125	3.43	3.21	3.32	0.22	91.89	22.69	1.20	1.15	1.20
1150	3.55	3.13	3.34	0.42	91.90	22.28	1.22	1.17	1.21
1175	3.70	3.05	3.38	0.65	91.88	21.93	1.25	1.19	1.24
1200	3.87	2.95	3.41	0.92	91.84	21.67	1.27	1.22	1.26
1225	4.07	2.85	3.46	1.23	91.73	21.46	1.29	1.25	1.28
1250	4.30	2.74	3.52	1.56	91.57	21.13	1.32	1.28	1.31
1275	4.57	2.64	3.60	1.93	91.38	20.66	1.37	1.32	1.35
1300	4.87	2.52	3.69	2.34	91.09	20.32	1.42	1.35	1.40

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss



2 Way-90° Power Splitter/Combiner

QBA-12N

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	AVG.				S	1	2
400	5.35	2.09	3.72	3.26	91.83	20.26	1.30	1.27	1.28
425	5.07	2.23	3.65	2.84	91.64	20.35	1.28	1.25	1.27
450	4.82	2.36	3.59	2.46	91.43	20.38	1.27	1.24	1.25
475	4.60	2.50	3.55	2.10	91.24	20.41	1.26	1.23	1.23
500	4.40	2.62	3.51	1.78	91.04	20.54	1.24	1.21	1.22
525	4.22	2.74	3.48	1.47	90.87	20.74	1.23	1.19	1.20
550	4.06	2.86	3.46	1.20	90.71	20.91	1.21	1.18	1.19
575	3.92	2.97	3.45	0.95	90.55	21.07	1.20	1.17	1.17
600	3.79	3.08	3.43	0.71	90.38	21.25	1.19	1.15	1.16
625	3.68	3.18	3.43	0.49	90.23	21.50	1.18	1.14	1.15
650	3.58	3.27	3.42	0.30	90.11	21.75	1.17	1.12	1.14
675	3.48	3.36	3.42	0.13	89.98	21.97	1.16	1.11	1.13
700	3.41	3.44	3.43	0.03	89.89	22.20	1.15	1.10	1.13
725	3.35	3.51	3.43	0.16	89.77	22.50	1.15	1.09	1.12
750	3.29	3.58	3.43	0.29	89.71	22.80	1.14	1.09	1.12
775	3.25	3.64	3.45	0.39	89.66	23.07	1.14	1.08	1.12
800	3.22	3.69	3.46	0.47	89.53	23.29	1.14	1.08	1.13
825	3.21	3.73	3.47	0.52	89.51	23.53	1.14	1.08	1.13
850	3.20	3.76	3.48	0.56	89.48	23.75	1.14	1.08	1.13
875	3.20	3.78	3.49	0.58	89.48	23.99	1.14	1.08	1.14
900	3.21	3.80	3.50	0.59	89.48	24.21	1.15	1.08	1.15
925	3.23	3.80	3.51	0.56	89.50	24.38	1.15	1.09	1.16
950	3.26	3.79	3.52	0.52	89.51	24.49	1.15	1.09	1.16
975	3.31	3.77	3.54	0.46	89.47	24.49	1.16	1.10	1.17
1000	3.37	3.74	3.55	0.37	89.45	24.51	1.17	1.11	1.18
1025	3.44	3.70	3.57	0.26	89.39	24.50	1.18	1.12	1.19
1050	3.52	3.65	3.59	0.13	89.34	24.46	1.18	1.13	1.20
1075	3.63	3.59	3.61	0.03	89.30	24.29	1.20	1.15	1.21
1100	3.74	3.53	3.63	0.20	89.18	24.09	1.21	1.16	1.23
1125	3.88	3.46	3.67	0.42	89.09	23.85	1.23	1.18	1.24
1150	4.03	3.37	3.70	0.66	88.93	23.58	1.25	1.20	1.26
1175	4.21	3.29	3.75	0.92	88.72	23.29	1.27	1.22	1.28
1200	4.41	3.20	3.81	1.21	88.50	22.94	1.30	1.25	1.31
1225	4.65	3.11	3.88	1.55	88.20	22.61	1.33	1.28	1.33
1250	4.91	3.01	3.96	1.90	87.83	22.29	1.36	1.31	1.36
1275	5.20	2.91	4.05	2.30	87.42	21.97	1.40	1.35	1.39
1300	5.53	2.80	4.17	2.72	86.92	21.66	1.43	1.38	1.43

¹ Total Loss = Insertion Loss+ 3dB Splitter Loss

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