

4 Way-0° Power Splitter/Combiner

ZC4PD-V2654+

Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS ¹ (dB)				AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB)			VSWR (:1)				
	S-1	S-2	S-3	S-4			1-2	1-4	3-4	S	1	2	3	4
26000	7.24	7.24	7.25	7.39	0.15	0.65	26.25	30.30	27.45	1.09	1.38	1.32	1.40	1.37
26500	7.27	7.27	7.29	7.42	0.16	0.64	37.49	30.77	42.87	1.21	1.35	1.32	1.38	1.30
27000	7.26	7.28	7.28	7.41	0.16	0.93	32.97	31.18	29.79	1.20	1.20	1.21	1.23	1.13
27500	7.26	7.29	7.24	7.37	0.13	0.76	26.55	31.84	25.03	1.07	1.05	1.07	1.07	1.01
28000	7.27	7.30	7.29	7.42	0.15	0.46	24.65	32.65	23.89	1.09	1.10	1.06	1.09	1.07
28500	7.31	7.33	7.36	7.50	0.19	0.71	24.59	33.68	24.48	1.19	1.08	1.07	1.08	1.03
29000	7.34	7.35	7.33	7.49	0.15	0.85	26.11	34.54	26.59	1.15	1.05	1.02	1.02	1.07
29500	7.32	7.33	7.31	7.46	0.16	0.76	29.06	35.22	29.93	1.04	1.13	1.07	1.09	1.14
30000	7.35	7.36	7.33	7.49	0.16	0.93	31.28	35.45	31.89	1.13	1.16	1.12	1.13	1.13
30500	7.39	7.42	7.36	7.51	0.16	0.83	29.69	35.18	30.41	1.18	1.15	1.13	1.13	1.10
31000	7.38	7.41	7.39	7.53	0.16	0.59	28.70	34.55	29.81	1.11	1.12	1.12	1.12	1.06
31500	7.37	7.41	7.42	7.55	0.18	0.79	29.95	33.83	31.42	1.02	1.10	1.11	1.11	1.04
32000	7.42	7.46	7.44	7.57	0.16	0.73	30.77	33.15	31.03	1.11	1.07	1.09	1.10	1.08
32500	7.43	7.47	7.50	7.63	0.20	0.73	27.31	32.55	26.76	1.14	1.07	1.07	1.08	1.14
33000	7.42	7.46	7.49	7.64	0.22	1.33	24.51	32.02	23.93	1.08	1.09	1.08	1.07	1.15
33500	7.46	7.49	7.42	7.58	0.17	1.41	23.54	31.48	23.01	1.05	1.08	1.08	1.04	1.11
34000	7.49	7.51	7.44	7.62	0.18	0.74	24.27	31.00	23.70	1.09	1.10	1.10	1.05	1.12
34500	7.47	7.50	7.51	7.69	0.22	0.99	26.73	30.71	26.19	1.05	1.18	1.18	1.13	1.19
35000	7.54	7.56	7.54	7.72	0.18	1.44	31.40	30.47	30.96	1.08	1.25	1.25	1.19	1.23
36000	7.61	7.62	7.64	7.79	0.18	1.29	34.01	30.49	34.14	1.21	1.19	1.15	1.16	1.10
37000	7.67	7.69	7.59	7.73	0.14	1.46	26.81	31.61	26.35	1.14	1.19	1.16	1.09	1.11
38000	7.77	7.77	7.75	7.91	0.16	1.17	25.55	33.41	25.44	1.33	1.21	1.15	1.14	1.08
39000	7.72	7.70	7.70	7.86	0.17	1.38	29.54	34.31	30.70	1.15	1.23	1.12	1.10	1.12
40000	7.76	7.76	7.72	7.86	0.14	1.46	32.55	34.15	36.32	1.12	1.20	1.13	1.18	1.08
41000	7.80	7.83	7.79	7.92	0.13	1.52	29.68	33.39	30.29	1.23	1.11	1.02	1.09	1.04
42000	7.82	7.82	7.78	7.95	0.16	1.22	27.87	32.49	28.97	1.04	1.20	1.08	1.04	1.11
43000	7.92	7.87	7.83	8.02	0.19	1.78	26.75	32.15	29.46	1.18	1.22	1.10	1.03	1.13
44000	7.96	7.92	7.91	8.08	0.17	1.41	37.06	33.23	49.77	1.18	1.32	1.21	1.15	1.17
45000	8.00	7.95	7.88	8.04	0.16	2.01	31.53	35.45	29.15	1.06	1.21	1.08	1.05	1.05
46000	8.10	8.06	8.07	8.23	0.17	1.39	27.80	38.40	27.32	1.29	1.30	1.18	1.19	1.17
47000	8.07	8.03	8.03	8.18	0.15	1.82	27.89	40.68	27.64	1.19	1.15	1.14	1.20	1.10
48000	8.07	8.07	8.04	8.18	0.14	1.62	30.48	42.09	29.95	1.11	1.15	1.07	1.17	1.08
50000	8.17	8.17	8.14	8.29	0.14	1.94	28.82	34.96	27.28	1.14	1.07	1.07	1.08	1.04

¹Total Loss = Insertion Loss + 6dB Splitter Loss



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 • Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site
The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. OR
ZC4PD-V2654+
2/17/2021
Page 1 of 3

4 Way-0° Power Splitter/Combiner

ZC4PD-V2654+

Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS ¹ (dB)				AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB)			VSWR (:1)				
	S-1	S-2	S-3	S-4			1-2	1-4	3-4	S	1	2	3	4
26000	7.22	7.24	7.26	7.32	0.10	2.16	27.09	29.31	28.29	1.07	1.37	1.31	1.39	1.36
26500	7.23	7.26	7.31	7.35	0.12	2.21	41.15	29.69	38.53	1.18	1.36	1.32	1.38	1.32
27000	7.23	7.28	7.30	7.35	0.12	1.84	29.20	30.06	26.86	1.19	1.21	1.22	1.23	1.17
27500	7.24	7.30	7.25	7.27	0.06	2.12	24.56	30.49	23.20	1.08	1.07	1.09	1.08	1.04
28000	7.24	7.30	7.29	7.33	0.09	2.53	23.29	31.18	22.52	1.08	1.09	1.08	1.10	1.03
28500	7.29	7.34	7.37	7.46	0.17	2.27	23.74	32.10	23.55	1.20	1.08	1.10	1.10	1.05
29000	7.32	7.37	7.35	7.45	0.13	2.23	25.89	32.87	26.36	1.18	1.01	1.05	1.03	1.07
29500	7.29	7.34	7.33	7.40	0.10	2.42	29.93	33.44	30.79	1.05	1.11	1.07	1.08	1.10
30000	7.32	7.36	7.35	7.41	0.09	2.31	31.81	33.67	31.75	1.13	1.16	1.12	1.13	1.09
30500	7.37	7.42	7.37	7.42	0.06	2.53	28.66	33.51	28.90	1.17	1.16	1.14	1.14	1.08
31000	7.35	7.42	7.40	7.46	0.11	2.86	27.41	33.15	28.20	1.11	1.15	1.14	1.14	1.10
31500	7.34	7.41	7.43	7.49	0.15	2.64	28.64	32.59	29.49	1.03	1.15	1.15	1.16	1.12
32000	7.38	7.46	7.45	7.52	0.14	2.68	29.25	31.97	29.05	1.09	1.12	1.13	1.14	1.13
32500	7.40	7.47	7.51	7.60	0.20	2.70	26.05	31.44	25.50	1.13	1.05	1.08	1.08	1.10
33000	7.39	7.46	7.49	7.57	0.18	2.50	23.57	30.98	23.13	1.09	1.04	1.03	1.02	1.05
33500	7.43	7.50	7.43	7.49	0.07	2.58	22.93	30.49	22.50	1.03	1.05	1.04	1.02	1.01
34000	7.45	7.50	7.46	7.54	0.10	3.03	24.03	30.06	23.49	1.08	1.07	1.06	1.03	1.05
34500	7.45	7.50	7.53	7.64	0.20	2.77	26.97	29.76	26.40	1.09	1.17	1.15	1.10	1.11
35000	7.51	7.56	7.54	7.65	0.14	2.68	32.25	29.55	32.28	1.06	1.26	1.25	1.19	1.19
36000	7.58	7.62	7.68	7.77	0.19	2.68	30.81	29.66	30.44	1.23	1.20	1.16	1.18	1.16
37000	7.64	7.70	7.60	7.65	0.10	2.92	25.02	30.70	24.62	1.15	1.19	1.17	1.13	1.10
38000	7.75	7.79	7.79	7.91	0.16	3.09	25.42	32.52	25.42	1.35	1.17	1.15	1.16	1.11
39000	7.68	7.70	7.71	7.81	0.14	3.10	31.56	33.35	34.01	1.14	1.23	1.15	1.15	1.11
40000	7.71	7.75	7.73	7.81	0.10	3.11	29.65	33.25	31.55	1.10	1.18	1.14	1.22	1.15
41000	7.76	7.83	7.80	7.88	0.12	3.15	29.34	32.70	29.68	1.23	1.07	1.07	1.15	1.09
42000	7.76	7.80	7.80	7.92	0.16	3.64	26.69	31.98	28.02	1.04	1.13	1.05	1.08	1.02
43000	7.87	7.89	7.84	7.97	0.12	3.41	26.66	31.48	29.33	1.20	1.15	1.07	1.04	1.03
44000	7.87	7.90	7.94	8.06	0.19	3.54	40.12	32.37	44.04	1.15	1.24	1.18	1.17	1.12
45000	7.93	7.96	7.89	8.02	0.13	3.65	29.21	34.46	27.33	1.09	1.13	1.05	1.08	1.07
46000	8.04	8.08	8.10	8.22	0.18	3.69	26.38	37.30	26.25	1.31	1.22	1.17	1.21	1.13
47000	7.99	8.03	8.03	8.16	0.17	3.41	28.18	39.54	28.20	1.17	1.09	1.14	1.21	1.18
48000	8.00	8.08	8.07	8.21	0.21	3.72	33.05	40.77	32.53	1.11	1.11	1.12	1.24	1.18
50000	8.08	8.18	8.15	8.29	0.21	3.99	27.67	34.31	26.52	1.15	1.05	1.12	1.16	1.17

¹Total Loss = Insertion Loss + 6dB Splitter Loss



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 • Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site
The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. OR
ZC4PD-V2654+
2/17/2021
Page 2 of 3

4 Way-0° Power Splitter/Combiner

ZC4PD-V2654+

Typical Performance Data

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

FREQ. (MHz)	TOTAL LOSS ¹ (dB)				AMP. UNBAL. (dB)	PHASE UNBAL. (deg.)	ISOLATION (dB)			VSWR (:1)				
	S-1	S-2	S-3	S-4			1-2	1-4	3-4	S	1	2	3	4
26000	7.34	7.32	7.35	7.46	0.14	1.33	24.40	29.98	24.80	1.10	1.39	1.32	1.40	1.45
26500	7.36	7.36	7.38	7.47	0.11	1.49	33.78	30.44	36.50	1.20	1.38	1.34	1.41	1.40
27000	7.34	7.35	7.38	7.46	0.13	1.53	32.64	30.93	28.84	1.19	1.22	1.23	1.25	1.19
27500	7.34	7.37	7.33	7.48	0.15	1.47	25.47	31.57	23.41	1.07	1.04	1.08	1.07	1.01
28000	7.35	7.39	7.37	7.43	0.08	1.44	23.30	32.22	21.99	1.09	1.09	1.03	1.07	1.08
28500	7.39	7.41	7.44	7.40	0.06	1.26	23.19	33.06	22.51	1.18	1.07	1.06	1.07	1.04
29000	7.42	7.43	7.42	7.52	0.10	1.79	24.79	34.08	24.84	1.14	1.06	1.04	1.01	1.11
29500	7.42	7.42	7.40	7.61	0.21	1.42	28.10	34.79	28.76	1.05	1.16	1.09	1.10	1.19
30000	7.44	7.44	7.43	7.61	0.18	1.55	30.44	34.92	30.14	1.12	1.20	1.12	1.14	1.18
30500	7.48	7.49	7.45	7.51	0.06	1.68	28.03	34.56	27.43	1.16	1.16	1.13	1.14	1.11
31000	7.47	7.50	7.48	7.44	0.06	1.83	26.53	33.95	26.38	1.10	1.13	1.11	1.12	1.07
31500	7.45	7.50	7.52	7.55	0.10	1.91	27.47	33.41	27.78	1.03	1.10	1.12	1.12	1.05
32000	7.49	7.55	7.54	7.62	0.13	1.74	29.52	32.74	29.57	1.09	1.07	1.12	1.11	1.09
32500	7.51	7.56	7.59	7.72	0.21	1.76	27.33	32.20	26.44	1.13	1.09	1.10	1.10	1.15
33000	7.51	7.55	7.59	7.77	0.26	1.41	24.07	31.78	23.14	1.08	1.13	1.10	1.09	1.15
33500	7.55	7.58	7.52	7.64	0.12	1.38	22.64	31.26	21.77	1.05	1.13	1.08	1.05	1.11
34000	7.58	7.59	7.53	7.59	0.06	1.52	22.95	30.74	22.04	1.08	1.13	1.08	1.05	1.10
34500	7.57	7.58	7.61	7.69	0.12	1.58	25.06	30.45	24.13	1.04	1.21	1.17	1.13	1.17
35000	7.63	7.64	7.64	7.76	0.13	1.60	29.35	30.28	28.44	1.07	1.28	1.25	1.20	1.25
36000	7.70	7.71	7.75	7.84	0.15	1.72	32.85	30.40	32.45	1.19	1.18	1.16	1.17	1.16
37000	7.75	7.78	7.69	7.78	0.09	1.62	25.99	31.39	25.12	1.11	1.18	1.13	1.07	1.09
38000	7.86	7.86	7.85	7.94	0.09	1.62	25.05	33.15	24.49	1.31	1.19	1.13	1.12	1.09
39000	7.82	7.80	7.81	7.94	0.14	1.81	28.51	34.14	29.13	1.12	1.23	1.12	1.09	1.14
40000	7.87	7.86	7.83	7.93	0.09	2.03	30.32	34.11	32.84	1.11	1.20	1.13	1.17	1.12
41000	7.89	7.93	7.91	7.99	0.10	1.87	29.56	33.46	29.81	1.20	1.11	1.04	1.10	1.01
42000	7.94	7.94	7.90	8.01	0.12	1.98	27.35	32.63	27.93	1.03	1.23	1.09	1.02	1.11
43000	8.03	7.97	7.97	8.12	0.15	1.80	25.61	32.38	27.63	1.18	1.25	1.10	1.02	1.13
44000	8.07	8.02	8.02	8.15	0.12	2.24	34.29	33.44	44.36	1.16	1.37	1.21	1.15	1.20
45000	8.11	8.05	8.02	8.12	0.10	2.07	31.66	35.74	29.72	1.07	1.24	1.06	1.06	1.04
46000	8.20	8.16	8.17	8.28	0.12	2.56	27.57	38.55	26.96	1.24	1.34	1.15	1.16	1.16
47000	8.18	8.13	8.17	8.29	0.16	2.58	27.63	40.65	26.76	1.21	1.21	1.12	1.19	1.10
48000	8.16	8.16	8.16	8.25	0.10	2.84	29.41	42.35	28.59	1.07	1.20	1.05	1.15	1.07
50000	8.23	8.28	8.27	8.40	0.17	2.51	29.38	35.39	27.17	1.12	1.10	1.10	1.09	1.07

¹Total Loss = Insertion Loss + 6dB Splitter Loss



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 • Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site
 The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. OR
ZC4PD-V2654+
2/17/2021
Page 3 of 3