

Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = 0°C, Pin = 0 dBm.

Freq. (GHz)	Insertion Loss (dB)			
	COM-J1	COM-J2	COM-J3	COM-J4
0.10	-1.49	-1.50	-1.48	-1.47
0.25	-1.56	-1.57	-1.54	-1.53
0.50	-1.62	-1.63	-1.60	-1.60
2.25	-1.88	-1.88	-1.85	-1.84
4.00	-1.98	-1.98	-1.95	-1.95
5.75	-2.33	-2.35	-2.34	-2.33
7.50	-2.39	-2.43	-2.40	-2.39
9.25	-2.76	-2.85	-2.75	-2.77
11.00	-3.07	-3.06	-3.03	-3.03
12.75	-2.93	-2.94	-2.89	-2.91
14.50	-3.84	-3.90	-3.86	-3.75
16.25	-3.76	-3.80	-3.77	-3.76
18.00	-3.78	-3.83	-3.77	-3.75
19.75	-3.97	-3.96	-3.94	-3.96
21.50	-4.13	-4.14	-4.17	-4.11
23.25	-4.27	-4.30	-4.33	-4.25
25.00	-4.54	-4.48	-4.57	-4.45
26.75	-4.68	-4.65	-4.64	-4.59
28.50	-4.89	-4.88	-4.92	-4.86
30.25	-4.64	-4.65	-4.66	-4.65
32.00	-4.78	-4.81	-4.80	-4.78
33.75	-5.03	-5.07	-5.04	-4.96
35.50	-5.19	-5.24	-5.20	-5.13
37.25	-5.51	-5.55	-5.58	-5.61
39.00	-5.91	-5.96	-6.02	-6.04
40.75	-6.02	-6.08	-6.00	-6.02
42.50	-6.81	-6.77	-6.93	-7.05
44.25	-6.02	-6.09	-6.08	-6.14
46.00	-6.17	-6.22	-6.13	-6.11
47.75	-6.98	-6.89	-6.98	-6.91
49.50	-6.52	-6.48	-6.52	-6.51
51.25	-6.84	-6.75	-6.67	-6.71
53.00	-6.75	-6.75	-6.68	-6.70
54.75	-6.95	-7.00	-6.93	-6.94
56.50	-7.34	-7.37	-7.41	-7.66
58.25	-7.26	-7.26	-7.33	-7.35
60.00	-7.63	-7.73	-7.67	-7.61
61.75	-7.96	-8.01	-8.28	-8.17
63.50	-8.39	-8.51	-8.52	-8.37
65.25	-8.92	-9.02	-9.17	-9.04
67.00	-9.14	-9.18	-9.28	-9.23

Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = 0°C, Pin = 0 dBm.

Freq. (GHz)	Return Loss, Active ports (dB)					R. Loss, Internally terminated ports (dB)			
	COM	J1	J2	J3	J4	J1	J2	J3	J4
0.10	-16.54	-16.70	-16.65	-16.79	-16.81	-35.87	-35.72	-29.03	-28.92
0.25	-16.29	-16.62	-16.56	-16.70	-16.72	-34.69	-34.62	-29.00	-28.95
0.50	-16.40	-16.89	-16.82	-16.98	-16.96	-31.82	-31.80	-28.05	-28.18
2.25	-27.25	-34.50	-34.00	-32.23	-31.71	-23.40	-23.24	-21.34	-21.92
4.00	-16.24	-21.02	-21.25	-21.28	-20.62	-22.18	-21.91	-19.60	-20.28
5.75	-17.24	-16.16	-16.29	-15.35	-15.62	-22.40	-21.42	-19.44	-19.96
7.50	-22.94	-22.16	-21.08	-21.47	-21.64	-22.48	-20.70	-20.08	-20.23
9.25	-13.69	-11.55	-10.91	-11.38	-11.20	-27.55	-23.97	-26.53	-25.32
11.00	-15.05	-16.89	-18.06	-17.08	-17.19	-42.27	-36.05	-31.21	-41.43
12.75	-18.21	-19.23	-19.99	-23.34	-20.76	-28.14	-26.88	-22.02	-25.16
14.50	-9.79	-10.00	-9.81	-9.58	-10.40	-21.97	-20.35	-18.64	-20.66
16.25	-19.44	-18.05	-16.73	-16.66	-17.26	-19.76	-18.02	-18.51	-20.16
18.00	-14.74	-13.96	-13.23	-13.89	-14.20	-20.87	-19.03	-21.43	-22.49
19.75	-16.17	-19.38	-20.66	-19.41	-16.91	-24.99	-24.05	-26.96	-25.98
21.50	-27.84	-36.97	-32.47	-28.36	-31.46	-32.63	-36.82	-30.30	-26.51
23.25	-16.62	-26.76	-22.77	-29.17	-22.39	-33.29	-30.76	-27.11	-24.67
25.00	-18.79	-13.94	-15.42	-12.72	-14.43	-23.86	-30.31	-22.53	-28.50
26.75	-20.10	-18.18	-20.83	-19.52	-20.80	-17.31	-19.59	-18.74	-19.65
28.50	-15.43	-11.28	-11.38	-11.96	-11.95	-15.62	-16.54	-17.20	-16.61
30.25	-30.91	-42.12	-33.50	-31.24	-32.32	-15.45	-15.28	-15.81	-15.71
32.00	-28.64	-44.62	-33.96	-32.70	-41.23	-19.01	-17.72	-17.42	-17.74
33.75	-20.55	-17.18	-17.74	-16.79	-21.02	-27.46	-23.83	-24.21	-19.76
35.50	-18.81	-18.48	-18.83	-18.45	-25.16	-17.75	-20.31	-20.30	-18.04
37.25	-15.47	-18.89	-20.86	-24.18	-18.88	-11.92	-12.56	-13.22	-13.19
39.00	-13.64	-14.05	-13.72	-14.47	-14.68	-13.11	-12.90	-13.83	-14.58
40.75	-15.14	-19.33	-18.57	-20.08	-21.93	-13.79	-14.24	-12.84	-13.23
42.50	-10.08	-10.47	-11.18	-9.64	-9.08	-12.56	-13.29	-12.00	-10.97
44.25	-36.98	-21.94	-21.28	-21.79	-16.64	-16.88	-15.94	-16.63	-13.53
46.00	-25.14	-23.96	-25.06	-20.92	-30.20	-15.44	-15.55	-14.50	-16.61
47.75	-11.91	-9.49	-10.43	-9.34	-10.11	-9.42	-10.25	-9.20	-9.98
49.50	-21.89	-17.02	-21.26	-17.56	-18.15	-9.91	-11.48	-10.17	-10.43
51.25	-17.56	-11.34	-13.17	-13.33	-13.13	-10.26	-11.43	-11.30	-10.96
53.00	-22.95	-16.75	-19.29	-18.97	-19.94	-20.13	-16.73	-22.59	-18.80
54.75	-20.90	-20.76	-21.30	-20.45	-32.93	-14.91	-17.36	-13.65	-13.60
56.50	-13.19	-16.22	-18.67	-17.94	-13.07	-10.86	-13.63	-11.29	-12.45
58.25	-19.83	-15.72	-17.71	-16.62	-15.49	-12.46	-13.59	-13.18	-18.52
60.00	-14.00	-16.49	-15.64	-17.53	-20.24	-16.40	-17.04	-14.23	-16.29
61.75	-11.87	-15.29	-15.24	-12.68	-13.80	-17.23	-20.53	-17.66	-15.21
63.50	-10.63	-12.25	-11.31	-11.93	-13.21	-28.01	-20.69	-17.64	-26.43
65.25	-15.62	-10.58	-10.15	-9.07	-9.71	-10.04	-9.35	-7.69	-9.79
67.00	-14.21	-26.64	-29.70	-18.02	-28.18	-9.39	-10.32	-7.59	-9.73

Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = 0°C, Pin = 0 dBm.

Freq. (GHz)	Isolation, Active states (dB)				Isolation, Disconnected states (dB)			
	COM-2	COM-4	J1-J2	J3-J4	COM-1	COM-2	COM-3	COM-4
0.10	-82.74	-90.72	-84.04	-92.30	-93.84	-92.48	-89.72	-98.01
0.25	-78.94	-90.00	-80.69	-89.54	-85.43	-86.01	-90.95	-88.50
0.50	-80.38	-82.48	-84.14	-83.01	-93.39	-89.24	-91.32	-88.14
2.25	-65.65	-65.86	-72.09	-75.72	-91.87	-88.08	-84.37	-95.08
4.00	-66.60	-65.94	-66.24	-62.92	-88.97	-91.42	-102.93	-90.48
5.75	-60.81	-62.61	-66.59	-60.66	-87.49	-88.08	-95.47	-90.17
7.50	-62.71	-61.23	-65.56	-66.59	-93.66	-91.77	-83.79	-95.50
9.25	-58.94	-59.29	-65.24	-64.70	-85.35	-92.89	-90.92	-86.54
11.00	-60.60	-59.32	-62.92	-62.61	-88.84	-83.60	-88.33	-90.56
12.75	-50.32	-52.17	-55.40	-52.50	-84.66	-104.90	-84.88	-93.11
14.50	-58.75	-56.71	-51.29	-60.31	-89.71	-92.97	-90.25	-93.74
16.25	-46.49	-47.70	-51.26	-51.66	-81.53	-85.08	-83.38	-87.42
18.00	-59.89	-59.56	-48.39	-45.59	-78.88	-89.63	-86.17	-83.12
19.75	-46.38	-45.83	-47.97	-48.39	-92.89	-96.93	-89.17	-96.45
21.50	-52.55	-49.95	-48.66	-48.85	-80.27	-86.28	-86.75	-96.39
23.25	-50.51	-50.52	-47.17	-45.88	-78.74	-84.92	-86.20	-85.46
25.00	-55.61	-55.99	-46.25	-44.88	-73.45	-78.37	-82.79	-85.89
26.75	-46.87	-43.20	-46.74	-44.10	-72.55	-79.50	-85.55	-71.55
28.50	-58.20	-58.88	-46.14	-40.41	-79.76	-73.68	-77.95	-74.69
30.25	-48.87	-43.50	-47.54	-43.92	-74.62	-78.29	-88.77	-77.82
32.00	-48.87	-45.34	-47.77	-48.40	-71.57	-87.81	-76.83	-81.69
33.75	-63.75	-57.38	-46.75	-49.49	-74.86	-71.71	-84.16	-71.71
35.50	-48.42	-43.80	-43.98	-42.79	-68.05	-70.49	-74.36	-84.31
37.25	-47.10	-42.20	-43.26	-39.05	-75.35	-76.15	-70.40	-68.26
39.00	-57.32	-60.46	-43.08	-40.55	-72.90	-73.76	-80.38	-67.54
40.75	-48.10	-44.03	-42.45	-45.25	-71.40	-75.15	-74.28	-73.99
42.50	-47.18	-48.81	-43.49	-43.91	-65.94	-69.67	-66.34	-67.92
44.25	-63.05	-51.16	-44.65	-45.24	-72.74	-72.08	-73.49	-69.10
46.00	-43.69	-44.20	-44.84	-48.23	-61.01	-64.19	-66.62	-65.51
47.75	-49.28	-51.53	-47.59	-46.92	-60.81	-74.20	-75.22	-73.86
49.50	-46.64	-49.02	-47.79	-45.77	-61.77	-79.33	-72.19	-70.01
51.25	-50.57	-54.94	-47.54	-50.60	-61.09	-68.15	-68.88	-69.45
53.00	-45.89	-45.91	-46.60	-46.63	-64.44	-69.24	-72.20	-71.10
54.75	-47.81	-47.81	-47.64	-47.83	-70.05	-72.89	-73.31	-76.35
56.50	-46.47	-46.50	-47.31	-53.11	-66.38	-80.28	-74.26	-63.25
58.25	-44.98	-47.54	-46.02	-45.91	-62.50	-65.33	-63.43	-64.24
60.00	-45.11	-46.65	-45.74	-47.03	-64.86	-63.99	-68.83	-62.99
61.75	-43.22	-44.52	-45.07	-54.70	-65.92	-63.58	-74.73	-66.45
63.50	-51.32	-48.48	-42.62	-47.43	-75.12	-59.21	-65.54	-76.72
65.25	-42.83	-42.15	-41.54	-42.73	-66.80	-58.19	-63.85	-64.50
67.00	-47.62	-49.80	-40.47	-40.45	-58.78	-60.25	-66.39	-63.22

Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = +25°C, Pin = 0 dBm.

Freq. (GHz)	Insertion Loss (dB)			
	COM-J1	COM-J2	COM-J3	COM-J4
0.10	-1.62	-1.63	-1.60	-1.60
0.25	-1.69	-1.69	-1.66	-1.66
0.50	-1.76	-1.76	-1.73	-1.73
2.25	-2.08	-2.08	-2.03	-2.03
4.00	-2.21	-2.19	-2.15	-2.15
5.75	-2.66	-2.57	-2.58	-2.57
7.50	-2.67	-2.66	-2.64	-2.64
9.25	-3.09	-3.10	-3.01	-3.03
11.00	-3.44	-3.35	-3.33	-3.33
12.75	-3.27	-3.22	-3.19	-3.20
14.50	-4.14	-4.17	-4.13	-4.04
16.25	-4.11	-4.14	-4.12	-4.10
18.00	-4.13	-4.18	-4.13	-4.11
19.75	-4.33	-4.33	-4.30	-4.33
21.50	-4.52	-4.54	-4.56	-4.50
23.25	-4.68	-4.71	-4.77	-4.67
25.00	-4.96	-4.92	-5.03	-4.89
26.75	-5.16	-5.14	-5.12	-5.06
28.50	-5.32	-5.33	-5.36	-5.30
30.25	-5.11	-5.13	-5.15	-5.13
32.00	-5.26	-5.30	-5.30	-5.27
33.75	-5.55	-5.58	-5.56	-5.49
35.50	-5.72	-5.77	-5.72	-5.68
37.25	-6.09	-6.14	-6.16	-6.20
39.00	-6.51	-6.57	-6.63	-6.67
40.75	-6.71	-6.80	-6.68	-6.71
42.50	-7.40	-7.37	-7.57	-7.66
44.25	-6.66	-6.74	-6.75	-6.81
46.00	-6.91	-6.93	-6.84	-6.83
47.75	-7.74	-7.63	-7.78	-7.67
49.50	-7.32	-7.27	-7.32	-7.31
51.25	-7.53	-7.48	-7.45	-7.49
53.00	-7.50	-7.53	-7.53	-7.52
54.75	-7.79	-7.86	-7.88	-7.85
56.50	-8.18	-8.16	-8.34	-8.51
58.25	-8.08	-8.09	-8.22	-8.23
60.00	-8.46	-8.53	-8.55	-8.48
61.75	-8.95	-8.95	-9.32	-9.18
63.50	-9.35	-9.44	-9.52	-9.33
65.25	-9.80	-9.88	-10.08	-9.92
67.00	-10.19	-10.15	-10.30	-10.25

Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = +25°C, Pin = 0 dBm.

Freq. (GHz)	Return Loss, Active ports (dB)					R. Loss, Internally terminated ports (dB)			
	COM	J1	J2	J3	J4	J1	J2	J3	J4
0.10	-15.99	-16.10	-16.09	-16.27	-16.26	-36.39	-35.85	-29.37	-29.28
0.25	-15.84	-16.07	-16.06	-16.23	-16.22	-35.14	-34.84	-29.33	-29.31
0.50	-15.90	-16.46	-16.45	-16.60	-16.58	-32.03	-31.92	-28.28	-28.42
2.25	-27.34	-35.63	-34.92	-32.84	-32.45	-23.30	-23.37	-21.44	-22.02
4.00	-15.91	-20.29	-20.36	-20.56	-19.86	-22.29	-22.35	-19.96	-20.64
5.75	-17.43	-15.72	-15.93	-15.09	-15.32	-21.88	-21.57	-19.59	-20.27
7.50	-23.70	-22.45	-21.41	-21.95	-22.41	-23.28	-21.12	-20.76	-21.03
9.25	-13.23	-11.59	-10.81	-11.45	-11.22	-28.60	-24.32	-27.73	-26.05
11.00	-15.62	-17.84	-18.34	-17.26	-17.42	-49.17	-34.14	-32.75	-54.11
12.75	-18.06	-19.25	-19.86	-22.76	-20.74	-29.56	-27.54	-22.80	-26.05
14.50	-10.25	-10.41	-10.04	-9.96	-10.67	-22.64	-20.63	-19.33	-21.24
16.25	-19.97	-17.92	-16.57	-16.64	-17.29	-19.99	-17.98	-18.77	-20.40
18.00	-14.93	-14.03	-13.27	-13.93	-14.37	-20.84	-18.81	-21.21	-22.67
19.75	-16.20	-18.97	-20.21	-19.29	-16.84	-25.17	-24.16	-26.93	-25.84
21.50	-26.47	-50.40	-36.98	-31.22	-29.64	-29.11	-32.32	-31.26	-25.04
23.25	-15.84	-25.11	-21.93	-27.55	-22.62	-38.92	-31.38	-27.12	-26.82
25.00	-17.83	-13.67	-15.09	-12.51	-14.03	-24.33	-30.78	-23.05	-31.40
26.75	-19.72	-17.66	-19.71	-18.66	-20.17	-17.34	-19.41	-18.15	-19.18
28.50	-16.50	-11.49	-11.47	-12.11	-12.23	-15.11	-15.69	-16.11	-15.92
30.25	-36.68	-47.31	-36.08	-29.91	-31.30	-16.05	-15.68	-16.51	-16.25
32.00	-32.57	-39.99	-33.05	-36.77	-38.31	-19.05	-17.65	-18.11	-17.69
33.75	-22.57	-16.60	-17.44	-16.82	-20.06	-30.75	-25.43	-25.98	-21.33
35.50	-19.57	-18.91	-19.68	-19.65	-26.03	-16.22	-19.01	-18.92	-16.75
37.25	-15.65	-18.17	-20.62	-23.05	-17.97	-12.11	-12.79	-13.60	-13.19
39.00	-13.43	-14.30	-13.77	-14.75	-14.80	-13.29	-12.73	-13.98	-14.63
40.75	-13.72	-17.79	-16.91	-19.32	-20.14	-13.76	-14.28	-12.94	-13.27
42.50	-10.96	-10.58	-11.33	-9.53	-9.18	-12.41	-13.25	-11.64	-10.99
44.25	-37.39	-24.35	-22.56	-23.77	-18.29	-18.65	-16.83	-18.15	-14.98
46.00	-24.56	-23.87	-24.62	-20.81	-28.28	-15.54	-15.99	-14.60	-16.23
47.75	-11.69	-9.66	-10.61	-9.26	-10.30	-9.64	-10.67	-9.22	-10.21
49.50	-20.33	-14.96	-17.32	-16.16	-16.86	-9.33	-10.62	-9.60	-9.83
51.25	-21.62	-12.21	-14.22	-14.58	-13.97	-11.40	-12.66	-13.08	-12.22
53.00	-22.46	-17.16	-19.36	-20.28	-20.36	-20.67	-16.59	-22.46	-19.22
54.75	-18.78	-19.17	-20.26	-19.46	-28.62	-15.02	-19.12	-13.99	-14.13
56.50	-13.79	-14.88	-18.08	-16.77	-12.95	-10.75	-13.30	-11.41	-12.33
58.25	-24.92	-16.48	-18.33	-17.60	-15.52	-13.46	-14.21	-14.42	-20.17
60.00	-15.96	-17.43	-16.54	-19.23	-22.03	-16.88	-18.29	-14.62	-16.39
61.75	-11.60	-14.48	-14.67	-12.23	-13.46	-18.56	-21.40	-17.75	-16.67
63.50	-11.07	-12.02	-10.92	-11.11	-12.85	-20.82	-18.08	-15.58	-21.06
65.25	-15.45	-11.66	-10.79	-9.63	-10.80	-10.93	-10.12	-8.15	-10.74
67.00	-13.60	-23.30	-28.12	-17.15	-22.60	-9.43	-10.14	-7.67	-9.73

Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = +25°C, Pin = 0 dBm.

Freq. (GHz)	Isolation, Active states (dB)				Isolation, Disconnected states (dB)			
	COM-2	COM-4	J1-J2	J3-J4	COM-1	COM-2	COM-3	COM-4
0.10	-92.18	-89.92	-80.71	-90.34	-101.06	-92.08	-89.28	-86.64
0.25	-80.50	-81.19	-86.68	-79.60	-94.21	-90.70	-85.35	-82.20
0.50	-79.11	-79.36	-79.17	-80.26	-89.28	-88.95	-93.98	-93.26
2.25	-66.11	-67.95	-70.67	-72.39	-89.61	-90.92	-88.96	-89.32
4.00	-61.89	-63.47	-65.31	-67.72	-87.79	-94.90	-86.88	-84.45
5.75	-57.50	-62.05	-60.56	-66.74	-81.81	-91.02	-84.85	-93.42
7.50	-59.02	-61.72	-59.46	-68.54	-91.03	-93.00	-91.08	-86.10
9.25	-66.34	-58.72	-59.28	-68.90	-77.25	-98.53	-85.25	-87.95
11.00	-56.44	-58.79	-59.56	-73.00	-75.80	-82.89	-84.77	-91.67
12.75	-53.88	-55.60	-55.08	-58.54	-75.76	-95.11	-91.59	-96.25
14.50	-51.91	-52.31	-51.44	-52.36	-84.93	-87.15	-87.61	-92.76
16.25	-50.68	-51.16	-50.87	-52.09	-81.92	-111.06	-91.61	-88.75
18.00	-50.23	-50.58	-48.09	-48.56	-80.69	-87.14	-87.56	-85.97
19.75	-51.34	-51.64	-47.96	-46.73	-88.52	-91.94	-85.53	-89.78
21.50	-52.75	-52.36	-48.64	-45.80	-81.88	-90.45	-87.83	-91.71
23.25	-51.73	-50.97	-46.96	-44.09	-82.02	-89.42	-92.92	-81.51
25.00	-52.76	-51.14	-45.84	-43.77	-73.31	-82.14	-81.62	-105.93
26.75	-53.70	-49.12	-45.42	-43.17	-74.72	-72.15	-83.47	-74.61
28.50	-56.49	-48.24	-45.26	-41.86	-70.60	-82.99	-75.49	-79.37
30.25	-55.59	-47.20	-47.09	-45.35	-72.36	-75.61	-83.33	-79.59
32.00	-54.84	-47.13	-46.96	-45.72	-71.28	-72.34	-95.82	-67.79
33.75	-57.15	-48.23	-46.03	-46.05	-73.89	-74.68	-81.23	-86.21
35.50	-60.39	-47.47	-44.18	-43.91	-72.44	-75.50	-72.82	-73.88
37.25	-57.55	-46.84	-43.42	-41.09	-76.74	-73.77	-83.49	-74.88
39.00	-55.90	-46.24	-43.08	-40.70	-71.55	-73.42	-68.86	-75.70
40.75	-51.74	-46.95	-43.42	-43.36	-68.36	-68.97	-73.14	-77.26
42.50	-51.37	-50.02	-44.53	-45.11	-66.25	-72.06	-75.39	-65.22
44.25	-52.73	-49.72	-45.83	-47.39	-64.56	-72.60	-77.67	-65.13
46.00	-48.49	-47.31	-46.66	-46.28	-60.03	-67.55	-72.88	-70.44
47.75	-48.70	-48.55	-49.95	-47.65	-62.01	-69.14	-70.24	-66.94
49.50	-48.44	-54.46	-51.27	-48.84	-68.55	-69.63	-68.40	-69.83
51.25	-49.79	-51.17	-50.76	-48.62	-61.43	-71.59	-72.95	-68.32
53.00	-47.78	-47.92	-48.76	-47.63	-68.66	-71.89	-67.25	-66.42
54.75	-47.99	-47.79	-48.55	-49.14	-63.99	-73.97	-76.27	-71.51
56.50	-48.76	-48.11	-47.95	-49.51	-64.13	-65.82	-68.37	-68.79
58.25	-46.84	-48.21	-46.46	-46.20	-74.68	-70.12	-63.02	-75.07
60.00	-46.90	-49.22	-45.96	-48.85	-67.99	-71.72	-65.27	-67.67
61.75	-46.99	-46.49	-45.30	-52.54	-66.43	-65.77	-66.77	-62.85
63.50	-46.87	-46.86	-43.27	-44.67	-63.85	-62.37	-68.44	-72.44
65.25	-46.58	-46.68	-41.96	-43.27	-63.10	-63.92	-68.41	-79.35
67.00	-46.47	-45.89	-41.08	-41.82	-59.11	-69.09	-62.54	-69.01

Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = +50°C, Pin = 0 dBm.

Freq. (GHz)	Insertion Loss (dB)			
	COM-J1	COM-J2	COM-J3	COM-J4
0.10	-1.74	-1.75	-1.70	-1.70
0.25	-1.81	-1.82	-1.77	-1.77
0.50	-1.89	-1.90	-1.85	-1.85
2.25	-2.22	-2.23	-2.16	-2.16
4.00	-2.32	-2.33	-2.27	-2.27
5.75	-2.72	-2.73	-2.71	-2.70
7.50	-2.80	-2.81	-2.78	-2.77
9.25	-3.18	-3.25	-3.15	-3.16
11.00	-3.55	-3.53	-3.48	-3.48
12.75	-3.39	-3.39	-3.33	-3.34
14.50	-4.31	-4.35	-4.30	-4.20
16.25	-4.32	-4.35	-4.30	-4.29
18.00	-4.32	-4.37	-4.29	-4.26
19.75	-4.58	-4.56	-4.50	-4.53
21.50	-4.74	-4.76	-4.74	-4.70
23.25	-4.90	-4.93	-4.96	-4.86
25.00	-5.21	-5.15	-5.23	-5.08
26.75	-5.42	-5.38	-5.31	-5.25
28.50	-5.54	-5.54	-5.53	-5.46
30.25	-5.33	-5.33	-5.32	-5.30
32.00	-5.49	-5.51	-5.48	-5.45
33.75	-5.76	-5.77	-5.72	-5.63
35.50	-5.93	-5.97	-5.88	-5.82
37.25	-6.28	-6.31	-6.30	-6.31
39.00	-6.72	-6.77	-6.78	-6.80
40.75	-6.92	-6.96	-6.83	-6.85
42.50	-7.60	-7.51	-7.65	-7.76
44.25	-6.89	-6.93	-6.88	-6.93
46.00	-7.13	-7.11	-6.98	-6.95
47.75	-7.96	-7.80	-7.85	-7.77
49.50	-7.52	-7.43	-7.40	-7.39
51.25	-7.74	-7.62	-7.50	-7.55
53.00	-7.72	-7.72	-7.59	-7.61
54.75	-8.00	-8.03	-7.91	-7.91
56.50	-8.37	-8.34	-8.35	-8.56
58.25	-8.31	-8.32	-8.30	-8.30
60.00	-8.70	-8.74	-8.66	-8.59
61.75	-9.13	-9.14	-9.34	-9.25
63.50	-9.54	-9.63	-9.59	-9.44
65.25	-10.09	-10.16	-10.23	-10.12
67.00	-10.42	-10.44	-10.49	-10.44

NOTES:

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at <https://www.minicircuits.com/terms/viewterm.html>



Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = +50°C, Pin = 0 dBm.

Freq. (GHz)	Return Loss, Active ports (dB)					R. Loss, Internally terminated ports (dB)			
	COM	J1	J2	J3	J4	J1	J2	J3	J4
0.10	-15.35	-15.55	-15.56	-15.78	-15.78	-37.14	-36.56	-29.75	-29.66
0.25	-15.31	-15.52	-15.53	-15.75	-15.75	-35.82	-35.34	-29.65	-29.63
0.50	-15.37	-15.91	-15.93	-16.12	-16.10	-32.37	-32.13	-28.59	-28.77
2.25	-26.77	-35.16	-34.92	-33.22	-32.54	-23.54	-23.41	-21.48	-22.07
4.00	-15.65	-19.53	-19.72	-19.99	-19.38	-22.91	-22.67	-20.21	-20.88
5.75	-16.71	-15.93	-16.00	-15.23	-15.43	-23.13	-21.95	-19.93	-20.56
7.50	-23.03	-22.54	-21.20	-21.84	-22.23	-23.18	-21.11	-20.63	-20.91
9.25	-13.22	-11.45	-10.77	-11.31	-11.13	-28.04	-24.28	-27.14	-25.73
11.00	-15.39	-17.16	-18.31	-17.41	-17.44	-44.14	-32.93	-34.55	-49.59
12.75	-17.93	-18.86	-19.75	-22.79	-20.65	-29.74	-27.48	-22.79	-25.81
14.50	-10.12	-10.31	-10.08	-9.90	-10.65	-22.56	-20.71	-19.12	-21.19
16.25	-19.38	-17.84	-16.43	-16.50	-17.24	-20.08	-18.25	-18.93	-20.80
18.00	-14.86	-14.15	-13.29	-14.05	-14.48	-21.18	-19.11	-21.68	-23.17
19.75	-15.71	-18.23	-19.39	-18.41	-16.06	-25.27	-24.44	-27.20	-25.26
21.50	-24.17	-42.47	-37.82	-34.14	-27.46	-27.61	-30.40	-31.37	-23.93
23.25	-14.92	-26.52	-22.75	-28.11	-23.66	-34.03	-31.27	-27.16	-25.51
25.00	-17.54	-13.50	-14.98	-12.51	-14.00	-23.64	-29.78	-22.66	-29.79
26.75	-19.03	-17.23	-19.50	-18.86	-20.13	-16.94	-19.10	-18.23	-19.16
28.50	-16.67	-11.54	-11.59	-12.13	-12.25	-14.88	-15.63	-16.27	-16.00
30.25	-40.21	-50.03	-37.22	-30.99	-32.54	-16.10	-15.90	-16.58	-16.35
32.00	-34.06	-38.52	-34.33	-35.30	-43.09	-19.83	-18.39	-18.40	-18.15
33.75	-24.22	-16.96	-17.96	-17.22	-20.97	-28.67	-25.24	-25.75	-20.72
35.50	-20.95	-19.87	-20.35	-20.23	-29.01	-16.90	-19.61	-19.58	-17.10
37.25	-16.10	-20.31	-23.30	-26.39	-19.43	-12.75	-13.45	-14.20	-14.11
39.00	-13.35	-15.01	-14.42	-15.38	-15.88	-13.70	-13.24	-14.32	-15.35
40.75	-13.64	-18.12	-17.48	-19.28	-20.46	-13.74	-14.33	-12.89	-13.15
42.50	-11.15	-10.90	-11.70	-10.02	-9.39	-12.60	-13.45	-12.06	-11.09
44.25	-33.72	-22.41	-21.80	-23.78	-18.05	-19.01	-17.39	-18.70	-15.20
46.00	-24.10	-23.39	-26.08	-20.54	-29.09	-15.47	-16.12	-14.58	-16.60
47.75	-11.62	-9.98	-10.93	-9.61	-10.44	-9.85	-10.82	-9.54	-10.38
49.50	-20.03	-15.94	-18.43	-17.32	-17.64	-10.03	-11.42	-10.36	-10.51
51.25	-21.75	-12.68	-14.81	-15.08	-14.59	-11.79	-13.19	-13.30	-12.74
53.00	-22.85	-17.31	-18.82	-20.36	-20.59	-19.62	-16.28	-22.00	-18.76
54.75	-19.19	-19.36	-20.02	-19.64	-30.12	-15.89	-20.23	-14.70	-14.88
56.50	-14.19	-16.04	-19.66	-18.46	-13.72	-11.18	-13.98	-11.74	-13.07
58.25	-21.60	-16.57	-18.45	-17.47	-16.29	-13.46	-14.37	-14.07	-20.30
60.00	-15.34	-17.12	-16.43	-17.88	-21.90	-16.76	-17.77	-14.91	-16.87
61.75	-11.31	-15.25	-15.10	-13.18	-14.51	-19.91	-23.46	-19.96	-17.59
63.50	-10.51	-12.89	-11.71	-12.11	-13.70	-22.54	-18.96	-16.51	-22.91
65.25	-15.61	-11.92	-11.17	-10.20	-10.92	-11.37	-10.40	-8.64	-11.12
67.00	-14.44	-22.67	-26.96	-17.66	-20.21	-9.68	-10.24	-7.93	-9.67

NOTES:

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at <https://www.minicircuits.com/terms/viewterm.html>



Solid State SP4T Switch

USB-1SP4T-A673

Typical Performance Data

Test Conditions: @ Temperature = +50°C, Pin = 0 dBm.

Freq. (GHz)	Isolation, Active states (dB)				Isolation, Disconnected states (dB)			
	COM-2	COM-4	J1-J2	J3-J4	COM-1	COM-2	COM-3	COM-4
0.10	-84.32	-92.62	-89.17	-90.41	-89.56	-92.12	-104.95	-92.72
0.25	-90.53	-78.28	-91.72	-92.84	-83.57	-88.35	-82.55	-94.89
0.50	-80.21	-91.07	-84.24	-89.48	-87.23	-89.46	-88.38	-90.74
2.25	-63.99	-64.55	-75.14	-78.68	-87.66	-87.16	-90.23	-97.27
4.00	-65.92	-65.82	-61.76	-61.95	-96.19	-97.33	-92.04	-93.88
5.75	-59.45	-60.70	-58.53	-58.93	-83.44	-89.64	-88.99	-95.53
7.50	-62.23	-61.64	-59.10	-64.07	-86.63	-94.70	-89.77	-90.14
9.25	-58.46	-58.13	-76.07	-66.05	-86.00	-85.71	-93.13	-90.69
11.00	-60.80	-58.89	-62.07	-60.87	-84.11	-90.30	-83.05	-91.84
12.75	-50.83	-52.10	-51.87	-53.17	-85.96	-91.92	-89.76	-96.28
14.50	-58.83	-58.59	-55.42	-58.89	-89.39	-88.76	-92.40	-92.69
16.25	-46.68	-47.32	-53.68	-51.92	-81.32	-90.42	-87.49	-82.80
18.00	-59.44	-59.73	-45.19	-45.52	-80.97	-88.49	-88.10	-90.39
19.75	-45.96	-45.30	-48.59	-48.36	-95.63	-88.19	-99.07	-99.68
21.50	-53.06	-51.34	-52.33	-49.12	-78.47	-84.27	-93.72	-83.92
23.25	-49.87	-48.84	-47.97	-45.11	-76.56	-90.01	-94.98	-86.15
25.00	-51.55	-48.70	-47.04	-44.87	-73.89	-83.30	-82.51	-89.50
26.75	-47.98	-44.80	-47.22	-45.08	-72.92	-80.33	-82.15	-76.96
28.50	-54.80	-52.08	-44.77	-40.83	-68.91	-72.63	-75.74	-78.49
30.25	-49.85	-44.51	-45.40	-43.30	-73.88	-78.17	-72.29	-82.91
32.00	-49.87	-44.30	-48.23	-47.46	-83.05	-80.45	-85.10	-86.07
33.75	-56.09	-56.80	-47.09	-50.72	-80.71	-79.15	-77.17	-75.45
35.50	-49.00	-43.97	-43.84	-44.03	-69.02	-75.86	-74.85	-77.50
37.25	-47.57	-43.17	-42.65	-39.74	-72.14	-85.10	-71.43	-72.59
39.00	-56.30	-56.53	-42.95	-40.35	-69.40	-69.50	-82.30	-77.85
40.75	-46.07	-42.99	-44.13	-45.52	-67.26	-78.90	-79.77	-71.98
42.50	-56.45	-49.59	-45.46	-45.27	-71.53	-76.87	-70.26	-78.95
44.25	-59.21	-48.10	-45.81	-45.08	-64.83	-70.94	-72.89	-78.38
46.00	-45.68	-46.38	-44.27	-44.31	-61.31	-77.20	-68.79	-70.05
47.75	-48.97	-47.03	-47.21	-46.20	-66.18	-72.05	-66.12	-74.99
49.50	-47.59	-55.30	-48.86	-51.59	-61.88	-79.86	-78.71	-65.57
51.25	-50.28	-47.10	-59.00	-48.32	-60.94	-72.81	-71.41	-74.09
53.00	-49.78	-49.92	-47.44	-44.90	-68.59	-66.94	-81.36	-68.86
54.75	-47.35	-47.11	-49.28	-50.32	-72.43	-77.59	-77.89	-74.68
56.50	-47.96	-49.70	-52.96	-49.96	-57.67	-66.68	-62.90	-71.02
58.25	-44.92	-46.45	-45.29	-43.68	-66.92	-69.35	-60.05	-68.60
60.00	-47.54	-47.83	-43.74	-47.21	-63.23	-75.68	-69.53	-89.39
61.75	-43.66	-44.66	-44.53	-54.06	-64.28	-73.65	-77.89	-68.75
63.50	-51.62	-50.73	-44.46	-45.33	-72.48	-61.17	-74.89	-65.04
65.25	-42.16	-42.65	-41.39	-41.99	-59.24	-60.91	-65.69	-70.75
67.00	-49.12	-48.46	-39.40	-40.91	-59.16	-60.06	-61.97	-65.55

NOTES:

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at <https://www.minicircuits.com/terms/viewterm.html>

