

SP4T Switch

MEM-SP4T-A18

Typical Performance Data

Test Conditions: @ Temperature = -10°C, Pin = 0 dBm.

Freq. (GHz)	Insertion Loss (dB)			
	COM-1	COM-2	COM-3	COM-4
0.01	-0.16	-0.15	-0.16	-0.19
0.50	-0.36	-0.36	-0.36	-0.40
1.00	-0.44	-0.44	-0.47	-0.49
1.50	-0.52	-0.51	-0.56	-0.58
2.00	-0.59	-0.58	-0.64	-0.65
2.50	-0.65	-0.64	-0.69	-0.70
3.00	-0.68	-0.67	-0.70	-0.72
3.50	-0.71	-0.69	-0.72	-0.74
4.00	-0.74	-0.71	-0.75	-0.77
4.50	-0.75	-0.73	-0.79	-0.81
5.00	-0.79	-0.76	-0.87	-0.86
5.50	-0.84	-0.83	-0.97	-0.95
6.00	-0.89	-0.88	-1.08	-1.05
6.50	-0.95	-0.94	-1.19	-1.15
7.00	-1.04	-1.04	-1.27	-1.22
7.50	-1.15	-1.13	-1.32	-1.27
8.00	-1.23	-1.20	-1.37	-1.29
8.50	-1.29	-1.22	-1.29	-1.23
9.00	-1.29	-1.23	-1.22	-1.19
9.50	-1.29	-1.20	-1.17	-1.21
10.00	-1.22	-1.17	-1.26	-1.32
10.50	-1.21	-1.16	-1.50	-1.43
11.00	-1.24	-1.20	-1.68	-1.58
11.50	-1.29	-1.27	-1.82	-1.66
12.00	-1.39	-1.41	-1.81	-1.69
12.50	-1.49	-1.53	-1.74	-1.68
13.00	-1.68	-1.73	-1.70	-1.73
13.50	-1.83	-1.91	-1.62	-1.72
14.00	-1.95	-2.02	-1.74	-1.85
14.50	-2.06	-2.08	-2.05	-1.97
15.00	-2.02	-1.98	-2.24	-2.09
15.50	-1.94	-1.87	-2.42	-2.20
16.00	-1.77	-1.68	-2.41	-2.21
16.50	-1.77	-1.67	-2.31	-2.20
17.00	-1.82	-1.73	-2.15	-2.14
17.50	-2.01	-1.93	-2.07	-2.11
18.00	-2.12	-2.07	-2.08	-2.19
18.50	-2.21	-2.24	-2.30	-2.42
19.00	-2.28	-2.40	-2.44	-2.37
19.50	-2.39	-2.55	-2.56	-2.53
20.00	-2.57	-2.82	-2.83	-2.77

SP4T Switch

MEM-SP4T-A18

Typical Performance Data

Test Conditions: @ Temperature = -10°C, Pin = 0 dBm.

Freq. (GHz)	Return Loss, Active ports (dB)					R. Loss, Internally terminated ports (dB)			
	COM	1	2	3	4	1	2	3	4
0.01	-36.30	-35.73	-36.14	-36.06	-34.25	-50.21	-40.08	-38.76	-38.20
0.50	-28.30	-28.00	-28.14	-26.85	-27.41	-36.13	-33.07	-30.74	-32.23
1.00	-24.72	-24.12	-24.04	-22.00	-23.20	-30.93	-28.83	-25.56	-27.78
1.50	-22.15	-21.47	-21.52	-19.31	-20.52	-27.20	-25.76	-22.05	-24.51
2.00	-20.37	-19.55	-19.65	-17.84	-18.68	-24.30	-23.12	-19.58	-21.58
2.50	-19.68	-18.67	-19.02	-17.91	-18.03	-22.14	-21.28	-17.97	-19.46
3.00	-19.98	-18.69	-19.08	-19.35	-18.80	-20.66	-19.63	-16.99	-18.04
3.50	-20.98	-19.31	-20.03	-23.07	-21.04	-19.60	-18.70	-16.63	-17.31
4.00	-23.11	-21.05	-22.17	-34.69	-26.34	-19.08	-18.16	-16.91	-17.17
4.50	-24.30	-23.39	-25.79	-28.78	-35.89	-18.51	-17.74	-17.75	-17.52
5.00	-23.75	-26.92	-30.83	-20.39	-23.83	-18.18	-17.66	-19.42	-18.59
5.50	-22.19	-28.40	-26.39	-16.64	-18.67	-18.07	-17.97	-22.20	-20.88
6.00	-19.17	-23.43	-20.84	-14.33	-15.57	-18.37	-18.83	-27.34	-25.19
6.50	-17.26	-19.36	-17.48	-12.77	-13.74	-18.85	-19.84	-32.08	-41.55
7.00	-15.30	-16.62	-15.25	-12.14	-13.09	-19.95	-21.95	-23.83	-27.40
7.50	-13.88	-14.62	-13.86	-12.14	-13.33	-21.89	-25.22	-18.81	-20.22
8.00	-12.90	-13.54	-13.11	-13.16	-14.50	-24.84	-28.91	-15.59	-16.54
8.50	-12.49	-12.98	-13.02	-15.29	-17.32	-28.89	-26.04	-13.52	-14.46
9.00	-12.94	-13.22	-13.81	-20.57	-23.80	-27.51	-21.45	-12.07	-13.06
9.50	-13.42	-14.33	-15.70	-41.69	-25.68	-22.46	-18.21	-11.18	-12.32
10.00	-15.03	-16.18	-17.81	-19.08	-18.04	-18.90	-16.11	-10.82	-12.20
10.50	-17.70	-19.58	-21.54	-13.51	-13.86	-16.30	-14.46	-10.95	-12.59
11.00	-20.03	-24.23	-22.48	-11.10	-12.42	-14.36	-13.20	-11.63	-13.34
11.50	-18.56	-20.67	-18.34	-10.28	-12.15	-13.16	-12.50	-13.09	-14.42
12.00	-15.86	-16.38	-15.28	-10.75	-12.86	-12.18	-11.76	-15.91	-16.23
12.50	-13.30	-13.75	-12.93	-12.61	-14.01	-11.77	-11.17	-21.28	-17.14
13.00	-11.48	-11.99	-11.31	-16.86	-15.72	-11.47	-10.73	-28.82	-18.01
13.50	-10.59	-11.15	-10.56	-25.72	-17.37	-11.43	-10.69	-21.06	-18.04
14.00	-9.92	-10.46	-9.81	-17.68	-15.91	-11.43	-10.58	-15.78	-16.68
14.50	-9.76	-10.35	-9.83	-12.31	-13.76	-11.84	-11.13	-13.06	-15.57
15.00	-10.24	-11.11	-10.86	-9.89	-11.84	-12.53	-12.17	-11.61	-14.17
15.50	-11.24	-12.89	-13.10	-8.77	-10.68	-13.71	-13.89	-10.55	-12.94
16.00	-12.63	-16.01	-17.18	-8.69	-10.64	-15.56	-16.10	-10.00	-12.44
16.50	-13.57	-17.98	-21.96	-10.10	-11.38	-17.96	-19.27	-10.33	-12.39
17.00	-12.34	-15.36	-17.30	-12.44	-12.60	-20.10	-23.43	-11.15	-12.64
17.50	-11.00	-13.14	-13.88	-15.95	-14.29	-21.03	-25.10	-12.37	-13.34
18.00	-10.15	-11.84	-12.06	-17.86	-14.76	-20.56	-23.81	-13.95	-14.38
18.50	-9.72	-10.82	-11.15	-15.49	-14.06	-19.88	-21.19	-16.92	-15.48
19.00	-9.18	-10.51	-10.70	-13.71	-13.85	-20.41	-20.88	-19.16	-16.73
19.50	-8.26	-9.93	-10.15	-12.92	-12.57	-20.35	-20.00	-18.98	-18.13
20.00	-8.02	-9.45	-9.75	-11.65	-11.00	-19.00	-18.76	-19.98	-19.76

SP4T Switch

MEM-SP4T-A18

Typical Performance Data

Test Conditions: @ Temperature = -10°C, Pin = 0 dBm.

Freq. (GHz)	Isolation, Active states (dB)				Isolation, Disconnected states (dB)			
	COM-1	COM-3	2-3	3-4	COM-1	COM-2	2-3	3-4
0.01	-97.99	-97.95	-93.59	-89.15	-98.53	-103.83	-96.07	-88.69
0.50	-88.46	-91.99	-79.09	-79.96	-85.28	-82.01	-81.36	-98.80
1.00	-86.09	-82.28	-73.25	-73.57	-78.41	-77.07	-77.69	-90.72
1.50	-79.74	-80.01	-69.78	-69.90	-73.18	-72.81	-72.95	-90.36
2.00	-79.69	-76.10	-67.14	-67.59	-70.69	-69.87	-69.08	-84.08
2.50	-86.16	-74.76	-64.86	-65.47	-70.70	-71.07	-66.52	-81.72
3.00	-70.59	-70.01	-64.69	-63.93	-70.24	-68.86	-65.62	-79.76
3.50	-68.30	-65.50	-65.09	-63.49	-66.16	-65.90	-66.03	-78.37
4.00	-66.76	-64.68	-59.90	-60.06	-64.85	-64.50	-61.14	-71.07
4.50	-64.51	-63.82	-60.74	-59.28	-69.10	-67.02	-60.76	-69.37
5.00	-62.28	-60.05	-59.42	-60.28	-69.70	-66.13	-60.01	-70.92
5.50	-64.08	-59.36	-60.51	-57.61	-64.78	-63.60	-60.72	-70.00
6.00	-59.89	-56.51	-58.80	-58.20	-65.21	-64.12	-58.84	-68.05
6.50	-58.24	-55.53	-52.88	-54.10	-69.81	-68.89	-54.00	-63.31
7.00	-57.05	-52.75	-53.39	-53.35	-68.40	-69.84	-54.00	-58.57
7.50	-53.69	-50.30	-51.78	-51.40	-58.51	-66.45	-53.50	-56.43
8.00	-51.09	-50.82	-51.37	-52.95	-52.36	-56.71	-55.90	-55.66
8.50	-55.19	-50.63	-53.65	-52.26	-50.11	-53.97	-54.97	-52.89
9.00	-52.39	-52.96	-58.16	-54.13	-46.07	-51.69	-56.72	-52.54
9.50	-51.78	-59.44	-60.18	-59.15	-47.59	-51.06	-56.37	-53.38
10.00	-58.22	-59.84	-58.85	-71.12	-47.42	-50.78	-68.93	-51.89
10.50	-60.67	-59.21	-62.96	-60.06	-48.07	-50.34	-58.64	-50.44
11.00	-70.69	-57.93	-61.77	-61.72	-49.23	-51.75	-60.28	-50.63
11.50	-53.86	-56.36	-56.20	-62.37	-46.21	-48.62	-55.06	-50.67
12.00	-57.47	-54.11	-57.23	-60.93	-48.16	-50.32	-58.30	-50.46
12.50	-56.15	-50.67	-52.58	-57.54	-48.11	-49.62	-53.53	-50.14
13.00	-51.23	-47.29	-52.86	-53.03	-47.28	-48.61	-57.86	-49.62
13.50	-53.83	-49.17	-48.47	-52.41	-47.39	-48.24	-51.99	-49.54
14.00	-50.74	-47.93	-62.80	-52.45	-46.95	-48.63	-58.21	-52.27
14.50	-49.43	-45.10	-51.70	-49.01	-47.43	-47.75	-58.64	-48.15
15.00	-47.68	-45.57	-49.95	-46.96	-47.62	-47.99	-59.14	-50.60
15.50	-45.67	-43.74	-46.70	-46.31	-45.96	-46.80	-52.62	-52.47
16.00	-43.29	-43.54	-47.77	-46.52	-43.95	-44.75	-57.97	-53.35
16.50	-41.78	-43.42	-48.76	-48.04	-42.34	-42.74	-57.22	-51.66
17.00	-41.98	-42.82	-47.89	-46.23	-42.20	-42.46	-53.96	-51.44
17.50	-41.17	-42.73	-47.40	-46.23	-41.80	-41.17	-51.98	-50.33
18.00	-40.16	-42.70	-52.79	-43.59	-39.91	-39.38	-52.53	-52.34
18.50	-37.74	-39.52	-47.77	-44.34	-38.05	-37.95	-51.72	-47.13
19.00	-36.13	-37.21	-43.81	-40.82	-35.96	-35.77	-47.29	-47.36
19.50	-33.73	-35.25	-40.50	-36.51	-33.77	-33.39	-46.82	-44.79
20.00	-31.32	-33.24	-38.02	-35.97	-30.84	-30.63	-44.97	-47.82

SP4T Switch

MEM-SP4T-A18

Typical Performance Data

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

Freq. (GHz)	Insertion Loss (dB)			
	COM-1	COM-2	COM-3	COM-4
0.01	-0.14	-0.14	-0.13	-0.13
0.50	-0.35	-0.36	-0.35	-0.36
1.00	-0.45	-0.45	-0.47	-0.46
1.50	-0.52	-0.53	-0.56	-0.54
2.00	-0.59	-0.59	-0.64	-0.61
2.50	-0.65	-0.65	-0.69	-0.66
3.00	-0.69	-0.69	-0.71	-0.69
3.50	-0.72	-0.72	-0.73	-0.71
4.00	-0.75	-0.74	-0.76	-0.74
4.50	-0.77	-0.75	-0.81	-0.78
5.00	-0.81	-0.79	-0.89	-0.84
5.50	-0.86	-0.86	-1.00	-0.94
6.00	-0.92	-0.92	-1.13	-1.05
6.50	-0.98	-0.99	-1.23	-1.15
7.00	-1.07	-1.09	-1.31	-1.22
7.50	-1.19	-1.18	-1.36	-1.27
8.00	-1.27	-1.26	-1.40	-1.28
8.50	-1.33	-1.28	-1.32	-1.22
9.00	-1.33	-1.28	-1.25	-1.19
9.50	-1.34	-1.25	-1.22	-1.21
10.00	-1.27	-1.23	-1.32	-1.34
10.50	-1.26	-1.22	-1.57	-1.46
11.00	-1.30	-1.27	-1.75	-1.61
11.50	-1.35	-1.35	-1.90	-1.70
12.00	-1.46	-1.50	-1.88	-1.72
12.50	-1.58	-1.64	-1.80	-1.71
13.00	-1.79	-1.85	-1.76	-1.75
13.50	-1.93	-2.01	-1.70	-1.75
14.00	-2.05	-2.11	-1.84	-1.90
14.50	-2.10	-2.12	-2.15	-2.01
15.00	-2.03	-2.00	-2.31	-2.10
15.50	-1.96	-1.91	-2.44	-2.19
16.00	-1.83	-1.75	-2.45	-2.21
16.50	-1.87	-1.77	-2.38	-2.24
17.00	-1.92	-1.85	-2.27	-2.23
17.50	-2.10	-2.05	-2.22	-2.21
18.00	-2.24	-2.21	-2.22	-2.29
18.50	-2.31	-2.38	-2.40	-2.46
19.00	-2.37	-2.51	-2.53	-2.42
19.50	-2.44	-2.63	-2.66	-2.58
20.00	-2.63	-2.89	-2.97	-2.84

SP4T Switch

MEM-SP4T-A18

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	1	2	3	4	1	2	3	4
0.01	-38.29	-37.55	-37.53	-37.86	-37.70	-63.25	-41.00	-39.74	-40.76
0.50	-28.86	-28.57	-28.59	-27.28	-28.57	-37.49	-33.58	-31.14	-33.45
1.00	-24.78	-24.27	-24.17	-22.12	-23.53	-31.36	-28.95	-25.65	-28.14
1.50	-22.15	-21.62	-21.67	-19.49	-20.76	-27.52	-25.88	-22.19	-24.75
2.00	-20.50	-19.86	-19.96	-18.14	-19.06	-24.71	-23.32	-19.76	-21.87
2.50	-19.65	-18.81	-19.24	-18.10	-18.27	-22.48	-21.53	-18.12	-19.70
3.00	-19.74	-18.69	-19.11	-19.37	-18.91	-20.93	-19.81	-17.06	-18.18
3.50	-20.45	-19.10	-19.83	-22.81	-21.07	-19.78	-18.79	-16.65	-17.39
4.00	-22.29	-20.65	-21.74	-33.92	-26.36	-19.04	-18.14	-16.83	-17.21
4.50	-23.80	-23.13	-25.44	-28.45	-34.10	-18.42	-17.64	-17.56	-17.53
5.00	-23.81	-26.99	-30.67	-20.00	-22.86	-18.08	-17.54	-19.15	-18.60
5.50	-22.09	-27.58	-25.84	-16.18	-17.84	-18.09	-17.84	-22.00	-21.05
6.00	-19.02	-22.58	-20.31	-13.90	-14.99	-18.45	-18.72	-27.16	-25.71
6.50	-17.05	-18.77	-17.01	-12.47	-13.37	-19.04	-19.89	-30.31	-44.60
7.00	-15.19	-16.26	-14.92	-11.97	-12.81	-20.17	-22.15	-23.38	-26.74
7.50	-13.83	-14.42	-13.64	-12.10	-13.17	-22.10	-25.73	-18.58	-19.92
8.00	-12.88	-13.40	-12.97	-13.15	-14.47	-25.18	-29.92	-15.36	-16.39
8.50	-12.48	-12.88	-12.99	-15.44	-17.54	-29.74	-26.11	-13.42	-14.35
9.00	-12.93	-13.18	-13.79	-21.20	-24.30	-27.81	-21.39	-12.06	-13.06
9.50	-13.55	-14.39	-15.78	-34.59	-24.32	-22.27	-18.09	-11.13	-12.40
10.00	-15.24	-16.39	-18.08	-18.35	-17.67	-18.69	-16.02	-10.78	-12.30
10.50	-18.00	-19.99	-21.77	-13.33	-13.62	-16.11	-14.42	-11.04	-12.61
11.00	-19.99	-24.21	-22.19	-10.95	-12.18	-14.29	-13.21	-11.82	-13.39
11.50	-18.21	-20.19	-18.04	-10.15	-11.91	-13.12	-12.44	-13.25	-14.59
12.00	-15.59	-16.05	-14.86	-10.75	-12.66	-12.18	-11.65	-16.20	-16.63
12.50	-13.03	-13.39	-12.55	-12.85	-14.10	-11.69	-11.10	-22.20	-17.94
13.00	-11.30	-11.63	-11.07	-17.76	-16.21	-11.37	-10.76	-30.28	-18.68
13.50	-10.52	-10.90	-10.42	-26.41	-17.36	-11.42	-10.77	-20.46	-17.93
14.00	-10.14	-10.60	-9.99	-16.67	-15.19	-11.66	-10.86	-15.37	-16.13
14.50	-10.26	-10.83	-10.34	-11.86	-13.33	-12.28	-11.62	-12.67	-15.24
15.00	-10.88	-11.83	-11.50	-9.86	-11.85	-13.15	-12.73	-11.45	-14.16
15.50	-11.88	-13.65	-13.84	-9.09	-11.05	-14.37	-14.44	-10.73	-13.25
16.00	-12.82	-16.11	-17.71	-9.20	-10.94	-15.90	-16.54	-10.39	-12.77
16.50	-13.57	-17.35	-21.39	-10.42	-11.42	-17.53	-19.22	-10.66	-12.66
17.00	-12.56	-15.35	-17.21	-12.37	-12.22	-19.42	-22.90	-11.50	-12.85
17.50	-11.31	-13.24	-13.84	-15.22	-13.41	-21.22	-25.15	-12.74	-13.39
18.00	-10.37	-11.72	-11.94	-17.05	-14.19	-21.47	-24.36	-14.17	-14.39
18.50	-9.87	-10.64	-11.08	-15.75	-13.99	-20.69	-21.57	-16.78	-15.85
19.00	-9.36	-10.47	-10.72	-13.97	-13.64	-20.42	-20.67	-19.48	-17.38
19.50	-8.59	-10.31	-10.38	-12.69	-12.50	-19.69	-19.50	-20.61	-19.07
20.00	-8.41	-9.94	-10.09	-11.41	-10.91	-18.47	-18.54	-21.46	-20.67

SP4T Switch

MEM-SP4T-A18

Typical Performance Data

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

Freq. (GHz)	Isolation, Active states (dB)				Isolation, Disconnected states (dB)			
	COM-1	COM-3	2-3	3-4	COM-1	COM-2	2-3	3-4
0.01	-91.77	-91.85	-94.64	-101.17	-96.96	-92.36	-97.70	-89.92
0.50	-87.66	-97.47	-79.55	-79.08	-82.02	-81.14	-80.10	-90.66
1.00	-81.79	-81.41	-73.79	-73.01	-78.22	-76.63	-76.81	-89.09
1.50	-82.02	-79.88	-69.92	-70.50	-73.48	-73.12	-71.72	-88.00
2.00	-81.26	-76.00	-67.51	-67.45	-70.80	-70.63	-68.81	-84.83
2.50	-85.37	-73.65	-64.58	-65.44	-71.02	-70.73	-66.51	-80.80
3.00	-71.15	-70.14	-64.64	-64.04	-70.33	-68.79	-65.58	-79.64
3.50	-68.95	-65.20	-65.12	-63.90	-66.10	-66.24	-65.93	-79.27
4.00	-67.91	-65.12	-60.21	-59.87	-65.34	-64.77	-61.45	-70.92
4.50	-64.39	-63.41	-60.85	-59.56	-68.55	-66.75	-60.91	-70.22
5.00	-61.94	-60.09	-59.38	-60.30	-70.70	-66.22	-59.86	-70.41
5.50	-64.68	-59.40	-60.42	-57.72	-64.78	-63.45	-60.49	-70.34
6.00	-60.54	-56.48	-58.45	-57.62	-64.80	-65.57	-58.53	-68.22
6.50	-58.18	-55.46	-53.13	-54.28	-70.44	-68.50	-54.23	-63.53
7.00	-57.18	-52.54	-53.40	-53.50	-67.85	-70.08	-54.04	-58.95
7.50	-55.43	-50.21	-51.67	-51.29	-59.23	-66.29	-53.44	-56.40
8.00	-51.35	-52.76	-51.53	-53.52	-52.69	-56.64	-55.27	-56.50
8.50	-55.09	-50.87	-53.91	-52.55	-50.02	-53.80	-55.06	-53.24
9.00	-53.06	-53.40	-58.15	-54.58	-46.58	-51.22	-57.04	-52.82
9.50	-52.10	-58.93	-60.35	-59.90	-48.19	-51.78	-56.19	-53.59
10.00	-58.51	-60.25	-60.50	-73.88	-47.74	-50.79	-68.57	-52.26
10.50	-59.21	-60.60	-61.75	-62.52	-48.27	-50.52	-58.78	-51.36
11.00	-69.36	-57.63	-61.43	-62.95	-49.34	-51.90	-61.55	-50.98
11.50	-54.31	-55.81	-56.19	-62.14	-46.46	-48.89	-55.19	-51.00
12.00	-56.60	-53.65	-56.36	-60.59	-48.21	-50.39	-57.60	-50.74
12.50	-56.07	-50.71	-52.75	-57.95	-48.40	-49.90	-53.31	-50.52
13.00	-50.80	-47.95	-52.44	-54.01	-46.88	-48.60	-60.10	-50.15
13.50	-52.80	-49.19	-48.69	-53.21	-47.73	-48.41	-52.43	-49.95
14.00	-52.22	-47.63	-64.73	-51.99	-47.41	-48.66	-58.74	-51.47
14.50	-49.56	-45.02	-51.05	-49.22	-47.63	-47.86	-58.37	-49.17
15.00	-47.59	-45.59	-49.80	-47.19	-47.56	-48.10	-58.69	-50.89
15.50	-45.54	-43.78	-46.88	-46.58	-45.91	-46.61	-52.97	-52.53
16.00	-43.36	-43.55	-48.12	-46.85	-43.90	-44.72	-58.35	-53.70
16.50	-42.10	-43.49	-48.96	-47.59	-42.54	-42.93	-57.97	-52.00
17.00	-42.07	-43.03	-48.04	-46.25	-42.29	-42.65	-54.22	-51.83
17.50	-41.34	-42.89	-47.48	-46.61	-41.94	-41.36	-52.13	-50.68
18.00	-40.32	-42.09	-51.83	-43.84	-40.09	-39.77	-51.79	-55.19
18.50	-37.97	-39.47	-48.61	-44.29	-38.12	-38.05	-51.22	-47.82
19.00	-36.23	-37.28	-43.93	-41.17	-35.93	-35.78	-47.28	-47.46
19.50	-33.76	-35.25	-41.17	-36.64	-33.63	-33.23	-47.44	-45.44
20.00	-31.32	-33.19	-38.03	-36.01	-30.73	-30.49	-44.95	-48.47

SP4T Switch

MEM-SP4T-A18

Typical Performance Data

Test Conditions: @ Temperature = +60°C, Pin = 0 dBm.

Freq. (GHz)	Insertion Loss (dB)			
	COM-1	COM-2	COM-3	COM-4
0.01	-0.16	-0.15	-0.15	-0.15
0.50	-0.38	-0.38	-0.38	-0.39
1.00	-0.48	-0.48	-0.50	-0.50
1.50	-0.56	-0.56	-0.60	-0.58
2.00	-0.62	-0.63	-0.67	-0.65
2.50	-0.68	-0.68	-0.72	-0.70
3.00	-0.72	-0.72	-0.75	-0.73
3.50	-0.76	-0.75	-0.77	-0.75
4.00	-0.79	-0.78	-0.80	-0.78
4.50	-0.81	-0.79	-0.85	-0.82
5.00	-0.85	-0.83	-0.94	-0.89
5.50	-0.90	-0.90	-1.05	-0.98
6.00	-0.97	-0.97	-1.18	-1.10
6.50	-1.03	-1.04	-1.29	-1.20
7.00	-1.13	-1.14	-1.37	-1.28
7.50	-1.25	-1.24	-1.42	-1.33
8.00	-1.33	-1.32	-1.46	-1.34
8.50	-1.39	-1.34	-1.38	-1.28
9.00	-1.40	-1.34	-1.32	-1.25
9.50	-1.41	-1.32	-1.30	-1.28
10.00	-1.33	-1.29	-1.40	-1.42
10.50	-1.32	-1.29	-1.66	-1.54
11.00	-1.36	-1.34	-1.84	-1.68
11.50	-1.43	-1.43	-1.98	-1.77
12.00	-1.54	-1.57	-1.95	-1.79
12.50	-1.66	-1.72	-1.87	-1.79
13.00	-1.87	-1.93	-1.84	-1.83
13.50	-2.00	-2.09	-1.79	-1.83
14.00	-2.13	-2.19	-1.94	-2.00
14.50	-2.17	-2.19	-2.26	-2.10
15.00	-2.09	-2.07	-2.41	-2.20
15.50	-2.03	-1.99	-2.53	-2.28
16.00	-1.92	-1.85	-2.53	-2.28
16.50	-1.96	-1.87	-2.45	-2.32
17.00	-2.02	-1.95	-2.35	-2.31
17.50	-2.20	-2.15	-2.31	-2.31
18.00	-2.33	-2.31	-2.33	-2.39
18.50	-2.41	-2.47	-2.51	-2.56
19.00	-2.47	-2.61	-2.65	-2.52
19.50	-2.56	-2.73	-2.78	-2.69
20.00	-2.73	-2.99	-3.09	-2.95

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SP4T Switch

MEM-SP4T-A18

Typical Performance Data

Test Conditions: @ Temperature = +60°C, Pin = 0 dBm.

Freq. (GHz)	Return Loss, Active ports (dB)					R. Loss, Internally terminated ports (dB)			
	COM	1	2	3	4	1	2	3	4
0.01	-37.03	-36.40	-36.61	-36.77	-36.46	-67.47	-40.74	-39.41	-39.75
0.50	-28.54	-28.22	-28.31	-27.03	-28.23	-38.12	-33.65	-31.21	-33.32
1.00	-24.67	-24.09	-24.05	-22.00	-23.38	-31.61	-28.93	-25.71	-28.07
1.50	-22.21	-21.60	-21.69	-19.48	-20.77	-27.74	-25.88	-22.25	-24.76
2.00	-20.62	-19.90	-20.04	-18.17	-19.10	-24.89	-23.35	-19.84	-21.90
2.50	-19.74	-18.86	-19.31	-18.10	-18.29	-22.63	-21.57	-18.17	-19.71
3.00	-19.76	-18.67	-19.10	-19.24	-18.85	-21.02	-19.82	-17.05	-18.15
3.50	-20.34	-19.02	-19.71	-22.42	-20.86	-19.80	-18.78	-16.60	-17.32
4.00	-22.01	-20.49	-21.49	-32.35	-25.96	-19.03	-18.12	-16.74	-17.08
4.50	-23.32	-22.94	-25.11	-29.08	-35.94	-18.36	-17.62	-17.40	-17.38
5.00	-23.42	-27.05	-31.15	-20.10	-23.05	-17.97	-17.55	-18.92	-18.46
5.50	-21.82	-28.07	-26.09	-16.16	-17.83	-17.96	-17.95	-21.75	-20.90
6.00	-18.83	-22.66	-20.31	-13.83	-14.95	-18.33	-18.95	-26.78	-25.53
6.50	-16.84	-18.67	-16.93	-12.38	-13.32	-18.96	-20.31	-29.55	-42.87
7.00	-15.01	-16.15	-14.83	-11.93	-12.78	-20.14	-22.87	-23.28	-26.70
7.50	-13.69	-14.32	-13.54	-12.10	-13.16	-22.12	-27.13	-18.50	-19.88
8.00	-12.78	-13.32	-12.89	-13.15	-14.51	-25.34	-31.51	-15.27	-16.33
8.50	-12.42	-12.84	-12.93	-15.55	-17.73	-30.25	-25.67	-13.34	-14.30
9.00	-12.90	-13.19	-13.77	-21.73	-24.92	-27.96	-20.89	-12.00	-13.00
9.50	-13.58	-14.48	-15.87	-31.37	-23.87	-22.21	-17.70	-11.08	-12.36
10.00	-15.41	-16.65	-18.40	-17.75	-17.32	-18.54	-15.74	-10.75	-12.30
10.50	-18.28	-20.56	-22.41	-13.09	-13.45	-16.00	-14.25	-11.06	-12.66
11.00	-20.08	-24.55	-22.28	-10.88	-12.15	-14.22	-13.17	-11.91	-13.49
11.50	-17.98	-19.89	-17.90	-10.19	-11.98	-13.08	-12.53	-13.40	-14.74
12.00	-15.38	-15.90	-14.82	-10.86	-12.81	-12.19	-11.86	-16.41	-16.86
12.50	-12.96	-13.36	-12.55	-13.09	-14.34	-11.73	-11.39	-22.67	-18.15
13.00	-11.32	-11.70	-11.14	-18.41	-16.54	-11.44	-11.12	-30.09	-18.83
13.50	-10.56	-11.00	-10.52	-27.05	-17.62	-11.47	-11.21	-20.22	-17.99
14.00	-10.23	-10.74	-10.15	-16.52	-15.27	-11.72	-11.39	-15.27	-16.02
14.50	-10.39	-11.03	-10.56	-11.79	-13.34	-12.35	-12.29	-12.57	-15.13
15.00	-11.05	-12.11	-11.83	-9.87	-11.92	-13.28	-13.62	-11.38	-14.09
15.50	-12.09	-14.05	-14.33	-9.21	-11.18	-14.56	-15.65	-10.74	-13.24
16.00	-12.97	-16.51	-18.28	-9.39	-11.20	-16.11	-18.17	-10.47	-12.88
16.50	-13.62	-17.54	-21.79	-10.69	-11.77	-17.73	-21.37	-10.75	-12.86
17.00	-12.58	-15.48	-17.39	-12.73	-12.51	-19.39	-26.22	-11.64	-13.03
17.50	-11.37	-13.45	-14.09	-15.63	-13.70	-20.97	-29.63	-12.94	-13.57
18.00	-10.47	-11.95	-12.17	-17.37	-14.43	-21.30	-28.18	-14.43	-14.62
18.50	-9.98	-10.84	-11.25	-15.94	-14.18	-20.78	-24.27	-17.05	-16.02
19.00	-9.44	-10.65	-10.93	-14.06	-13.88	-20.55	-23.33	-19.73	-17.57
19.50	-8.68	-10.48	-10.63	-12.78	-12.63	-19.75	-22.01	-20.77	-19.36
20.00	-8.49	-10.12	-10.30	-11.48	-11.06	-18.48	-20.89	-21.64	-20.81

NOTES:

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SP4T Switch

MEM-SP4T-A18

Typical Performance Data

Test Conditions: @ Temperature = +60°C, Pin = 0 dBm.

Freq. (GHz)	Isolation, Active states (dB)				Isolation, Disconnected states (dB)			
	COM-1	COM-3	2-3	3-4	COM-1	COM-2	2-3	3-4
0.01	-103.31	-89.98	-98.83	-95.01	-94.39	-100.74	-93.56	-91.72
0.50	-90.56	-96.11	-78.66	-78.77	-82.50	-81.43	-78.63	-91.56
1.00	-86.08	-83.74	-73.55	-73.78	-78.82	-76.94	-75.10	-94.11
1.50	-79.65	-81.18	-70.16	-70.21	-73.31	-72.55	-71.21	-87.18
2.00	-78.62	-75.48	-67.36	-67.53	-70.02	-70.00	-68.11	-83.16
2.50	-82.80	-74.26	-64.68	-65.55	-71.36	-70.10	-66.00	-81.29
3.00	-70.85	-70.04	-64.36	-63.69	-69.78	-68.40	-64.93	-80.18
3.50	-68.92	-65.40	-65.10	-63.84	-66.06	-65.54	-65.01	-80.62
4.00	-68.81	-66.15	-60.12	-59.82	-65.91	-64.96	-60.91	-71.07
4.50	-64.56	-63.89	-60.68	-59.57	-68.49	-66.36	-60.53	-70.22
5.00	-61.62	-60.31	-59.26	-60.45	-69.77	-65.82	-59.25	-71.27
5.50	-64.61	-59.83	-60.01	-57.84	-65.06	-62.89	-59.85	-71.02
6.00	-60.75	-56.79	-58.21	-57.36	-65.61	-67.59	-58.02	-68.89
6.50	-58.34	-55.72	-53.36	-54.28	-70.58	-68.88	-54.12	-64.21
7.00	-57.11	-52.68	-53.62	-53.78	-68.78	-71.79	-53.98	-59.72
7.50	-56.60	-50.42	-51.71	-51.43	-60.03	-69.42	-53.26	-56.67
8.00	-51.86	-54.46	-52.16	-54.11	-53.02	-57.61	-54.89	-57.81
8.50	-55.04	-51.24	-54.47	-52.70	-50.10	-54.35	-54.98	-53.58
9.00	-53.65	-53.83	-58.74	-54.84	-46.83	-51.29	-56.83	-53.22
9.50	-52.67	-58.12	-60.77	-59.70	-48.54	-52.11	-55.75	-53.53
10.00	-58.98	-60.76	-61.50	-68.60	-47.86	-51.02	-66.58	-52.63
10.50	-58.94	-61.07	-62.07	-64.66	-48.37	-50.64	-57.95	-51.77
11.00	-63.40	-57.60	-61.23	-64.68	-49.10	-52.05	-60.37	-51.31
11.50	-54.74	-55.52	-55.96	-63.31	-46.56	-49.13	-55.04	-51.32
12.00	-55.94	-53.21	-55.64	-61.54	-48.17	-50.49	-56.74	-51.13
12.50	-56.22	-50.63	-52.89	-59.07	-48.46	-50.08	-53.47	-51.03
13.00	-51.07	-48.56	-52.35	-55.54	-46.65	-48.87	-62.52	-50.53
13.50	-52.36	-49.16	-49.08	-53.90	-47.78	-48.67	-53.02	-50.12
14.00	-53.90	-47.37	-67.15	-51.66	-47.66	-48.84	-60.18	-51.03
14.50	-49.58	-44.99	-50.64	-49.24	-47.68	-48.09	-57.38	-49.70
15.00	-47.29	-45.51	-49.52	-47.33	-47.50	-48.33	-57.15	-51.11
15.50	-45.06	-43.83	-46.90	-46.64	-45.86	-46.75	-52.36	-52.62
16.00	-43.05	-43.56	-48.32	-47.00	-43.87	-44.95	-57.34	-54.01
16.50	-41.86	-43.51	-48.89	-47.23	-42.63	-43.17	-56.29	-52.26
17.00	-41.80	-43.20	-48.03	-46.34	-42.30	-42.98	-52.84	-52.21
17.50	-41.13	-42.99	-47.44	-46.76	-41.89	-41.47	-50.73	-50.67
18.00	-40.19	-41.76	-50.38	-44.20	-40.12	-39.96	-49.89	-58.35
18.50	-37.93	-39.38	-48.90	-44.33	-38.11	-38.12	-49.42	-48.08
19.00	-36.21	-37.34	-43.83	-41.24	-35.97	-35.80	-46.28	-47.52
19.50	-33.78	-35.32	-41.21	-36.75	-33.64	-33.20	-46.41	-45.97
20.00	-31.35	-33.24	-37.89	-36.06	-30.75	-30.37	-44.37	-48.95

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