

Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = 0°C, Pin=8dBm

FREQUENCY (MHz)	INSERTION LOSS							
	(dB)							
	COM-J1	COM-J2	COM-J3	COM-J4	COM-J5	COM-J6	COM-J7	COM-J8
0.1	4.77	4.75	4.78	4.77	4.80	4.74	4.74	4.77
0.5	4.10	4.08	4.10	4.10	4.10	4.07	4.07	4.09
1	4.08	4.05	4.08	4.08	4.07	4.04	4.05	4.06
5	4.08	4.05	4.08	4.08	4.07	4.04	4.05	4.06
10	4.09	4.06	4.08	4.08	4.08	4.04	4.05	4.06
20	4.10	4.07	4.10	4.10	4.09	4.05	4.06	4.07
50	4.14	4.11	4.13	4.14	4.12	4.07	4.08	4.10
100	4.21	4.18	4.20	4.21	4.16	4.12	4.13	4.15
200	4.35	4.31	4.33	4.35	4.23	4.18	4.19	4.21
400	4.61	4.55	4.58	4.60	4.39	4.32	4.32	4.36
600	4.66	4.61	4.63	4.65	4.57	4.47	4.48	4.54
800	4.74	4.64	4.67	4.74	4.72	4.62	4.63	4.70
1000	5.02	4.89	4.92	5.02	4.81	4.71	4.72	4.79
1200	5.19	5.09	5.11	5.18	4.88	4.76	4.77	4.84
1400	5.27	5.11	5.14	5.27	4.96	4.80	4.79	4.91
1600	5.47	5.28	5.32	5.47	5.07	4.87	4.87	5.04
1800	5.69	5.56	5.59	5.68	5.20	5.00	5.00	5.17
2000	5.83	5.67	5.69	5.82	5.31	5.16	5.17	5.29
2200	5.92	5.73	5.77	5.92	5.42	5.30	5.31	5.40
2400	6.03	5.95	5.97	6.02	5.54	5.40	5.41	5.51
2600	6.21	6.10	6.12	6.20	5.63	5.48	5.49	5.59
2800	6.30	6.20	6.23	6.29	5.69	5.56	5.57	5.64
3000	6.40	6.35	6.37	6.39	5.76	5.65	5.66	5.72
3200	6.57	6.43	6.45	6.57	5.90	5.72	5.73	5.87
3400	6.64	6.52	6.54	6.64	6.03	5.77	5.78	6.00
3600	6.85	6.56	6.59	6.85	6.05	5.83	5.84	6.01
3800	6.95	6.61	6.64	6.95	6.04	5.89	5.90	6.01
4000	6.97	6.71	6.75	6.97	6.16	5.89	5.90	6.15
4200	7.17	6.62	6.68	7.17	6.31	5.81	5.82	6.31
4400	7.17	6.75	6.79	7.18	6.33	5.79	5.80	6.33
4600	7.25	7.00	7.03	7.26	6.30	5.97	5.97	6.29
4800	7.28	6.84	6.91	7.29	6.46	6.25	6.26	6.41
5000	7.37	7.13	7.13	7.38	6.69	6.39	6.39	6.65
5200	7.91	7.62	7.62	7.94	6.67	6.30	6.30	6.66
5400	7.85	7.50	7.53	7.88	6.55	6.23	6.24	6.54
5600	8.07	7.80	7.78	8.11	6.84	6.50	6.52	6.77
5800	8.82	8.36	8.40	8.88	7.42	6.94	6.99	7.33
6000	8.71	8.28	8.33	8.72	7.71	7.19	7.24	7.66
6200	8.68	8.30	8.33	8.71	7.60	7.16	7.18	7.58
6400	8.93	8.55	8.63	8.93	7.45	7.02	7.06	7.40
6600	8.82	8.49	8.53	8.79	7.41	7.03	7.07	7.37
6800	8.71	8.44	8.44	8.72	7.36	7.09	7.10	7.36
7000	8.76	8.50	8.48	8.77	7.44	7.09	7.08	7.42
7200	8.91	8.61	8.58	8.92	7.67	7.14	7.16	7.63
7400	9.14	8.84	8.78	9.16	7.74	7.28	7.33	7.70
7600	9.91	9.33	9.17	9.97	7.83	7.45	7.49	7.78
7800	10.12	9.67	9.58	10.12	8.41	7.74	7.77	8.34
8000	10.22	9.90	9.73	10.26	9.16	8.25	8.30	9.11
8200	11.09	10.52	10.33	11.08	9.60	8.74	8.82	9.56
8400	11.50	10.93	10.86	11.35	9.75	9.00	9.11	9.65
8500	11.42	10.95	10.86	11.28	9.75	9.03	9.15	9.64

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = 0°C, Pin=8dBm

FREQUENCY (MHz)	INSERTION LOSS							
	(dB)							
	COM-J9	COM-J10	COM-J11	COM-J12	COM-J13	COM-J14	COM-J15	COM-J16
0.1	4.80	4.79	4.82	4.80	4.76	4.83	4.78	4.77
0.5	4.12	4.11	4.16	4.14	4.08	4.17	4.10	4.11
1	4.09	4.08	4.13	4.11	4.06	4.14	4.07	4.09
5	4.09	4.08	4.13	4.11	4.06	4.15	4.07	4.09
10	4.10	4.09	4.14	4.11	4.06	4.15	4.08	4.09
20	4.11	4.10	4.14	4.12	4.08	4.16	4.09	4.10
50	4.13	4.12	4.17	4.15	4.11	4.20	4.13	4.14
100	4.18	4.17	4.21	4.20	4.19	4.28	4.19	4.21
200	4.25	4.23	4.28	4.28	4.32	4.41	4.32	4.35
400	4.41	4.37	4.42	4.43	4.56	4.64	4.55	4.59
600	4.58	4.52	4.58	4.61	4.60	4.68	4.59	4.63
800	4.73	4.67	4.73	4.76	4.70	4.75	4.65	4.73
1000	4.83	4.76	4.82	4.85	4.99	5.03	4.93	5.04
1200	4.89	4.81	4.86	4.91	5.17	5.23	5.14	5.21
1400	4.96	4.84	4.88	4.98	5.22	5.23	5.13	5.26
1600	5.07	4.90	4.95	5.08	5.40	5.36	5.26	5.44
1800	5.21	5.03	5.08	5.22	5.61	5.63	5.54	5.65
2000	5.33	5.19	5.26	5.35	5.75	5.75	5.65	5.79
2200	5.43	5.34	5.42	5.46	5.86	5.83	5.73	5.90
2400	5.54	5.45	5.52	5.57	5.96	6.06	5.96	6.01
2600	5.62	5.52	5.59	5.65	6.14	6.21	6.11	6.19
2800	5.68	5.61	5.68	5.71	6.24	6.31	6.22	6.29
3000	5.78	5.71	5.77	5.81	6.35	6.45	6.35	6.39
3200	5.95	5.78	5.83	5.98	6.53	6.55	6.45	6.57
3400	6.08	5.82	5.87	6.12	6.62	6.63	6.54	6.66
3600	6.09	5.87	5.93	6.13	6.86	6.68	6.60	6.90
3800	6.08	5.92	5.98	6.12	6.97	6.78	6.69	7.02
4000	6.20	5.93	5.95	6.23	6.98	6.88	6.80	7.01
4200	6.35	5.87	5.87	6.38	7.18	6.77	6.72	7.22
4400	6.37	5.86	5.87	6.42	7.21	6.91	6.84	7.25
4600	6.36	6.02	6.08	6.42	7.29	7.15	7.09	7.32
4800	6.51	6.28	6.37	6.56	7.33	6.99	6.96	7.36
5000	6.70	6.42	6.46	6.75	7.43	7.34	7.23	7.48
5200	6.67	6.34	6.34	6.73	8.01	7.86	7.77	8.07
5400	6.57	6.27	6.31	6.64	7.96	7.71	7.66	8.01
5600	6.87	6.51	6.65	6.95	8.11	7.99	7.87	8.15
5800	7.46	6.96	7.13	7.50	8.86	8.52	8.45	8.87
6000	7.75	7.26	7.34	7.79	8.77	8.44	8.41	8.79
6200	7.65	7.25	7.26	7.71	8.78	8.51	8.45	8.77
6400	7.49	7.09	7.14	7.55	9.00	8.71	8.71	9.01
6600	7.43	7.09	7.14	7.50	8.90	8.65	8.63	8.94
6800	7.39	7.16	7.13	7.51	8.83	8.63	8.59	8.88
7000	7.51	7.19	7.13	7.65	8.89	8.69	8.63	8.94
7200	7.76	7.25	7.25	7.87	9.04	8.81	8.75	9.07
7400	7.80	7.39	7.40	7.92	9.25	9.01	8.92	9.27
7600	7.85	7.55	7.50	7.99	9.96	9.44	9.30	9.97
7800	8.39	7.81	7.73	8.49	10.14	9.78	9.70	10.17
8000	9.08	8.26	8.23	9.17	10.33	10.03	9.88	10.36
8200	9.50	8.76	8.78	9.65	11.17	10.63	10.46	11.17
8400	9.67	9.05	9.08	9.84	11.54	11.03	10.93	11.49
8500	9.69	9.10	9.13	9.87	11.49	11.06	10.95	11.44

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = 0°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Active Ports								
	(:1)								
	COM	J1	J2	J3	J4	J5	J6	J7	J8
0.1	2.03	2.01	2.00	2.02	2.01	2.04	2.01	2.01	2.02
0.5	1.30	1.30	1.29	1.30	1.29	1.30	1.29	1.29	1.29
1	1.26	1.26	1.25	1.26	1.26	1.26	1.25	1.25	1.25
5	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
10	1.24	1.25	1.24	1.24	1.24	1.24	1.24	1.24	1.24
20	1.24	1.25	1.24	1.25	1.25	1.25	1.24	1.24	1.24
50	1.25	1.25	1.24	1.25	1.25	1.25	1.24	1.25	1.25
100	1.25	1.25	1.24	1.25	1.25	1.26	1.26	1.25	1.26
200	1.19	1.20	1.20	1.20	1.20	1.26	1.25	1.25	1.25
400	1.02	1.03	1.04	1.04	1.04	1.25	1.23	1.23	1.23
600	1.20	1.17	1.16	1.16	1.16	1.18	1.18	1.18	1.17
800	1.29	1.28	1.29	1.30	1.28	1.07	1.10	1.09	1.08
1000	1.18	1.14	1.19	1.20	1.16	1.05	1.02	1.02	1.03
1200	1.10	1.06	1.05	1.06	1.04	1.15	1.15	1.14	1.12
1400	1.21	1.14	1.25	1.26	1.16	1.17	1.26	1.24	1.16
1600	1.17	1.20	1.23	1.24	1.20	1.15	1.29	1.27	1.17
1800	1.05	1.23	1.08	1.07	1.21	1.20	1.24	1.23	1.21
2000	1.04	1.08	1.09	1.09	1.08	1.27	1.14	1.14	1.26
2200	1.07	1.22	1.09	1.11	1.22	1.26	1.06	1.08	1.25
2400	1.01	1.31	1.15	1.12	1.31	1.19	1.06	1.06	1.19
2600	1.18	1.18	1.14	1.11	1.19	1.17	1.05	1.04	1.15
2800	1.28	1.18	1.13	1.10	1.19	1.18	1.08	1.08	1.17
3000	1.13	1.14	1.23	1.20	1.15	1.14	1.16	1.15	1.13
3200	1.41	1.03	1.22	1.20	1.04	1.03	1.21	1.20	1.03
3400	1.55	1.01	1.26	1.24	1.01	1.10	1.18	1.18	1.07
3600	1.27	1.14	1.31	1.32	1.13	1.14	1.14	1.14	1.10
3800	1.48	1.21	1.19	1.22	1.22	1.07	1.25	1.25	1.03
4000	1.57	1.16	1.28	1.30	1.16	1.18	1.41	1.41	1.17
4200	1.35	1.40	1.36	1.44	1.41	1.39	1.49	1.50	1.38
4400	1.41	1.39	1.15	1.21	1.43	1.50	1.41	1.42	1.50
4600	1.32	1.14	1.12	1.17	1.18	1.39	1.19	1.19	1.42
4800	1.33	1.37	1.28	1.37	1.41	1.14	1.04	1.04	1.17
5000	1.18	1.31	1.22	1.21	1.32	1.10	1.24	1.25	1.10
5200	1.19	1.04	1.07	1.11	1.05	1.28	1.35	1.35	1.28
5400	1.31	1.23	1.20	1.28	1.26	1.27	1.30	1.30	1.31
5600	1.12	1.10	1.24	1.14	1.06	1.10	1.14	1.12	1.14
5800	1.56	1.25	1.15	1.18	1.34	1.19	1.16	1.17	1.18
6000	1.57	1.28	1.15	1.22	1.31	1.36	1.29	1.31	1.35
6200	1.40	1.13	1.09	1.02	1.19	1.34	1.29	1.28	1.35
6400	1.60	1.38	1.14	1.26	1.42	1.21	1.16	1.15	1.21
6600	1.55	1.30	1.17	1.24	1.28	1.21	1.15	1.17	1.21
6800	1.42	1.20	1.12	1.16	1.17	1.24	1.24	1.24	1.26
7000	1.25	1.19	1.19	1.18	1.13	1.17	1.23	1.19	1.18
7200	1.20	1.12	1.19	1.12	1.06	1.07	1.13	1.07	1.06
7400	1.48	1.20	1.35	1.23	1.16	1.03	1.05	1.03	1.03
7600	1.63	1.13	1.49	1.27	1.17	1.16	1.20	1.14	1.14
7800	1.40	1.09	1.28	1.11	1.06	1.22	1.39	1.33	1.21
8000	1.57	1.14	1.48	1.26	1.10	1.11	1.49	1.50	1.16
8200	1.75	1.16	1.62	1.43	1.12	1.20	1.42	1.47	1.17
8400	1.44	1.54	1.32	1.22	1.41	1.46	1.25	1.31	1.34
8500	1.24	1.60	1.31	1.16	1.47	1.55	1.19	1.24	1.42

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = 0°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Active Ports							
	(:1)							
	J9	J10	J11	J12	J13	J14	J15	J16
0.1	2.03	2.02	2.01	2.01	2.01	2.00	2.02	2.00
0.5	1.30	1.30	1.30	1.30	1.29	1.30	1.30	1.29
1	1.26	1.26	1.27	1.26	1.25	1.27	1.26	1.26
5	1.25	1.24	1.25	1.25	1.24	1.25	1.24	1.24
10	1.25	1.24	1.25	1.25	1.24	1.25	1.24	1.24
20	1.25	1.24	1.26	1.25	1.24	1.26	1.24	1.25
50	1.26	1.25	1.26	1.26	1.25	1.26	1.25	1.25
100	1.27	1.26	1.27	1.27	1.25	1.26	1.25	1.25
200	1.27	1.26	1.27	1.27	1.21	1.21	1.20	1.20
400	1.25	1.24	1.24	1.25	1.05	1.04	1.04	1.05
600	1.18	1.18	1.17	1.17	1.18	1.18	1.16	1.17
800	1.06	1.09	1.07	1.06	1.30	1.32	1.30	1.30
1000	1.06	1.03	1.05	1.06	1.15	1.18	1.19	1.16
1200	1.15	1.16	1.18	1.16	1.09	1.10	1.06	1.08
1400	1.16	1.27	1.26	1.17	1.18	1.31	1.28	1.19
1600	1.16	1.31	1.26	1.14	1.21	1.24	1.26	1.20
1800	1.23	1.25	1.19	1.21	1.23	1.05	1.08	1.22
2000	1.30	1.16	1.13	1.29	1.08	1.12	1.08	1.09
2200	1.29	1.09	1.13	1.29	1.23	1.04	1.10	1.23
2400	1.21	1.07	1.13	1.22	1.29	1.16	1.14	1.32
2600	1.17	1.07	1.12	1.18	1.16	1.19	1.13	1.19
2800	1.17	1.11	1.16	1.18	1.15	1.18	1.11	1.18
3000	1.12	1.18	1.22	1.12	1.11	1.27	1.20	1.13
3200	1.03	1.22	1.24	1.02	1.03	1.26	1.20	1.05
3400	1.08	1.19	1.20	1.10	1.02	1.31	1.25	1.02
3600	1.11	1.13	1.16	1.12	1.14	1.32	1.30	1.16
3800	1.05	1.21	1.26	1.06	1.19	1.19	1.19	1.23
4000	1.18	1.36	1.41	1.18	1.12	1.30	1.29	1.15
4200	1.38	1.47	1.49	1.38	1.36	1.36	1.40	1.38
4400	1.50	1.45	1.40	1.50	1.37	1.13	1.19	1.38
4600	1.43	1.27	1.19	1.43	1.15	1.15	1.18	1.15
4800	1.18	1.05	1.03	1.20	1.38	1.28	1.35	1.36
5000	1.06	1.14	1.21	1.03	1.31	1.18	1.18	1.31
5200	1.23	1.29	1.30	1.19	1.05	1.10	1.12	1.04
5400	1.26	1.33	1.25	1.24	1.25	1.21	1.29	1.22
5600	1.11	1.22	1.12	1.17	1.09	1.21	1.14	1.14
5800	1.19	1.14	1.19	1.18	1.24	1.14	1.17	1.20
6000	1.34	1.19	1.29	1.28	1.23	1.15	1.20	1.21
6200	1.32	1.20	1.25	1.28	1.13	1.08	1.02	1.08
6400	1.19	1.11	1.12	1.17	1.32	1.12	1.25	1.29
6600	1.18	1.06	1.14	1.15	1.20	1.16	1.21	1.24
6800	1.22	1.14	1.20	1.23	1.13	1.11	1.15	1.17
7000	1.18	1.15	1.18	1.26	1.12	1.19	1.18	1.19
7200	1.11	1.11	1.11	1.18	1.08	1.20	1.13	1.15
7400	1.03	1.05	1.03	1.11	1.18	1.36	1.23	1.24
7600	1.18	1.08	1.18	1.25	1.14	1.46	1.23	1.15
7800	1.24	1.29	1.41	1.29	1.08	1.28	1.07	1.11
8000	1.11	1.49	1.53	1.11	1.18	1.57	1.31	1.21
8200	1.17	1.51	1.42	1.15	1.10	1.62	1.40	1.10
8400	1.43	1.39	1.24	1.42	1.45	1.34	1.18	1.45
8500	1.52	1.32	1.21	1.52	1.50	1.40	1.18	1.53

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = 0°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Terminated Ports								
	(:1)								
	COM	J1	J2	J3	J4	J5	J6	J7	J8
0.1	2.02	1.49	1.58	1.57	1.54	1.59	1.56	1.55	1.60
0.5	1.29	1.19	1.31	1.27	1.25	1.29	1.28	1.27	1.31
1	1.25	1.18	1.30	1.26	1.23	1.27	1.27	1.26	1.30
5	1.24	1.17	1.29	1.25	1.23	1.27	1.26	1.25	1.30
10	1.23	1.17	1.29	1.25	1.23	1.27	1.26	1.25	1.29
20	1.23	1.17	1.29	1.25	1.23	1.27	1.26	1.25	1.29
50	1.23	1.16	1.28	1.24	1.22	1.26	1.26	1.25	1.29
100	1.22	1.16	1.27	1.24	1.21	1.25	1.25	1.24	1.27
200	1.21	1.15	1.27	1.23	1.20	1.24	1.24	1.23	1.27
400	1.21	1.15	1.27	1.23	1.21	1.25	1.24	1.23	1.27
600	1.20	1.15	1.26	1.23	1.21	1.24	1.24	1.23	1.27
800	1.20	1.14	1.25	1.22	1.20	1.23	1.24	1.23	1.27
1000	1.19	1.14	1.24	1.21	1.20	1.23	1.23	1.22	1.26
1200	1.18	1.13	1.23	1.20	1.19	1.21	1.23	1.21	1.25
1400	1.18	1.12	1.21	1.19	1.18	1.20	1.22	1.21	1.24
1600	1.17	1.11	1.20	1.18	1.17	1.19	1.21	1.20	1.23
1800	1.15	1.11	1.18	1.16	1.16	1.17	1.20	1.19	1.22
2000	1.14	1.10	1.17	1.15	1.15	1.16	1.19	1.18	1.20
2200	1.13	1.09	1.15	1.14	1.13	1.15	1.18	1.17	1.19
2400	1.12	1.08	1.14	1.13	1.12	1.13	1.16	1.16	1.17
2600	1.11	1.08	1.14	1.12	1.11	1.12	1.15	1.15	1.16
2800	1.09	1.07	1.13	1.11	1.10	1.11	1.14	1.15	1.15
3000	1.07	1.06	1.12	1.10	1.08	1.10	1.13	1.14	1.14
3200	1.06	1.05	1.12	1.09	1.07	1.09	1.12	1.13	1.13
3400	1.05	1.05	1.12	1.09	1.07	1.08	1.11	1.12	1.12
3600	1.05	1.05	1.12	1.08	1.06	1.07	1.10	1.11	1.12
3800	1.05	1.04	1.13	1.07	1.05	1.06	1.09	1.10	1.11
4000	1.06	1.03	1.14	1.07	1.04	1.05	1.09	1.09	1.11
4200	1.08	1.03	1.14	1.07	1.04	1.05	1.09	1.08	1.10
4400	1.08	1.03	1.15	1.07	1.03	1.06	1.08	1.07	1.10
4600	1.11	1.04	1.16	1.07	1.02	1.06	1.07	1.06	1.09
4800	1.13	1.04	1.17	1.07	1.02	1.06	1.07	1.06	1.09
5000	1.15	1.05	1.17	1.06	1.01	1.06	1.07	1.05	1.08
5200	1.17	1.04	1.18	1.06	1.01	1.06	1.07	1.04	1.08
5400	1.19	1.06	1.16	1.06	1.01	1.05	1.05	1.04	1.07
5600	1.20	1.05	1.18	1.05	1.01	1.06	1.07	1.04	1.08
5800	1.23	1.07	1.16	1.06	1.02	1.05	1.05	1.04	1.07
6000	1.24	1.06	1.16	1.05	1.03	1.06	1.06	1.04	1.08
6200	1.27	1.06	1.17	1.06	1.04	1.07	1.07	1.06	1.09
6400	1.26	1.07	1.17	1.06	1.06	1.08	1.08	1.07	1.10
6600	1.26	1.07	1.18	1.08	1.08	1.09	1.10	1.10	1.12
6800	1.23	1.09	1.20	1.10	1.10	1.12	1.12	1.13	1.14
7000	1.24	1.12	1.21	1.12	1.12	1.13	1.14	1.16	1.15
7200	1.23	1.15	1.23	1.14	1.14	1.15	1.17	1.19	1.16
7400	1.22	1.18	1.25	1.17	1.17	1.18	1.19	1.23	1.18
7600	1.19	1.22	1.26	1.19	1.20	1.20	1.22	1.26	1.20
7800	1.17	1.27	1.29	1.23	1.23	1.23	1.24	1.30	1.22
8000	1.15	1.32	1.31	1.26	1.27	1.26	1.27	1.34	1.24
8200	1.15	1.36	1.33	1.28	1.30	1.29	1.29	1.37	1.26
8400	1.16	1.41	1.35	1.31	1.34	1.32	1.31	1.40	1.28
8500	1.16	1.42	1.36	1.32	1.35	1.33	1.32	1.41	1.29

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = 0°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Terminated Ports							
	(:1)							
	J9	J10	J11	J12	J13	J14	J15	J16
0.1	1.56	1.58	1.53	1.50	1.57	1.49	1.55	1.53
0.5	1.25	1.28	1.24	1.20	1.29	1.19	1.26	1.25
1	1.24	1.26	1.23	1.18	1.27	1.18	1.25	1.24
5	1.23	1.26	1.22	1.18	1.27	1.17	1.25	1.24
10	1.23	1.26	1.22	1.18	1.27	1.17	1.25	1.24
20	1.23	1.26	1.22	1.17	1.27	1.17	1.25	1.24
50	1.23	1.25	1.22	1.17	1.27	1.17	1.24	1.23
100	1.22	1.24	1.21	1.16	1.25	1.16	1.23	1.22
200	1.21	1.23	1.20	1.15	1.24	1.15	1.22	1.21
400	1.21	1.24	1.20	1.16	1.25	1.15	1.23	1.22
600	1.21	1.23	1.19	1.15	1.24	1.15	1.22	1.21
800	1.20	1.23	1.19	1.15	1.23	1.14	1.22	1.21
1000	1.19	1.22	1.18	1.14	1.22	1.13	1.21	1.20
1200	1.18	1.21	1.17	1.14	1.21	1.13	1.20	1.20
1400	1.17	1.20	1.16	1.13	1.20	1.11	1.19	1.19
1600	1.15	1.19	1.14	1.12	1.18	1.11	1.17	1.17
1800	1.14	1.18	1.13	1.11	1.16	1.09	1.16	1.16
2000	1.13	1.17	1.12	1.10	1.15	1.08	1.15	1.15
2200	1.12	1.15	1.11	1.09	1.14	1.07	1.14	1.13
2400	1.11	1.14	1.10	1.09	1.13	1.06	1.13	1.12
2600	1.10	1.13	1.10	1.07	1.13	1.04	1.12	1.10
2800	1.09	1.12	1.10	1.07	1.12	1.03	1.11	1.09
3000	1.09	1.11	1.10	1.06	1.12	1.02	1.10	1.08
3200	1.09	1.11	1.10	1.05	1.11	1.01	1.10	1.07
3400	1.08	1.10	1.09	1.05	1.11	1.01	1.09	1.06
3600	1.07	1.10	1.08	1.04	1.10	1.02	1.08	1.06
3800	1.06	1.09	1.07	1.04	1.09	1.02	1.07	1.05
4000	1.06	1.09	1.07	1.04	1.08	1.03	1.07	1.05
4200	1.06	1.09	1.07	1.04	1.08	1.04	1.08	1.05
4400	1.05	1.09	1.06	1.04	1.08	1.05	1.08	1.06
4600	1.05	1.08	1.05	1.04	1.07	1.06	1.08	1.07
4800	1.05	1.09	1.05	1.05	1.07	1.08	1.08	1.07
5000	1.04	1.08	1.05	1.05	1.06	1.09	1.08	1.08
5200	1.04	1.08	1.04	1.06	1.07	1.11	1.08	1.09
5400	1.04	1.07	1.04	1.05	1.06	1.11	1.08	1.08
5600	1.04	1.08	1.04	1.06	1.07	1.13	1.08	1.09
5800	1.04	1.07	1.05	1.06	1.07	1.13	1.07	1.08
6000	1.04	1.08	1.05	1.07	1.08	1.15	1.07	1.09
6200	1.06	1.09	1.07	1.09	1.10	1.17	1.07	1.10
6400	1.07	1.10	1.09	1.10	1.11	1.19	1.06	1.10
6600	1.09	1.12	1.10	1.12	1.13	1.21	1.08	1.12
6800	1.11	1.15	1.13	1.14	1.15	1.23	1.10	1.13
7000	1.13	1.17	1.16	1.17	1.17	1.26	1.12	1.15
7200	1.16	1.19	1.19	1.20	1.20	1.29	1.14	1.18
7400	1.19	1.22	1.22	1.23	1.22	1.32	1.16	1.20
7600	1.21	1.25	1.25	1.27	1.25	1.35	1.18	1.23
7800	1.25	1.28	1.29	1.30	1.28	1.39	1.22	1.26
8000	1.28	1.31	1.33	1.34	1.32	1.42	1.25	1.29
8200	1.31	1.34	1.35	1.37	1.33	1.45	1.27	1.33
8400	1.34	1.37	1.38	1.40	1.35	1.47	1.30	1.36
8500	1.34	1.38	1.38	1.41	1.35	1.48	1.31	1.37

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = 0°C, Pin=8dBm

FREQUENCY (MHz)	ISOLATION COM to terminated port								
	(dB)								
	COM-J1 @J16 Active	COM-J2 @J1 Active	COM-J4 @J3 Active	COM-J5 @J6 Active	COM-J7 @J6 Active	COM-J8 @J7 Active	COM-J10 @J9 Active	COM-J13 @J12 Active	COM-J15 @J14 Active
0.1	104.83	95.37	95.76	103.09	103.09	97.51	96.60	94.48	97.87
0.5	97.59	96.10	94.36	99.98	99.98	93.23	97.03	94.26	110.62
1	96.63	103.45	107.04	98.61	98.61	96.46	96.81	99.91	101.40
5	94.48	104.63	93.99	103.55	103.55	93.52	98.77	93.11	97.30
10	119.55	105.16	101.04	103.87	103.87	106.23	107.36	100.58	100.02
20	124.71	104.47	95.69	101.88	101.88	99.89	100.20	105.46	96.81
50	119.45	104.28	93.55	95.40	95.40	98.18	98.60	99.02	95.56
100	113.20	106.78	90.06	95.03	95.03	95.26	94.32	99.43	98.33
200	110.74	105.97	88.93	92.98	92.98	94.74	94.62	98.72	95.42
400	112.10	116.98	89.41	94.05	94.05	94.36	92.84	94.91	93.27
600	119.67	117.17	89.86	93.72	93.72	94.58	90.90	94.98	92.35
800	111.45	123.27	89.61	95.34	95.34	96.13	89.69	94.00	92.84
1000	106.78	110.96	90.15	95.52	95.52	97.60	90.21	95.07	91.89
1200	115.99	130.35	90.95	96.73	96.73	104.33	90.07	95.74	92.03
1400	114.24	113.69	90.77	97.62	97.62	104.23	89.75	93.48	92.68
1600	109.29	102.43	91.24	98.11	98.11	107.08	90.14	95.89	92.11
1800	116.97	110.55	91.89	99.90	99.90	118.60	89.78	94.90	91.69
2000	124.15	116.13	93.87	101.63	101.63	126.55	89.79	97.09	91.13
2200	105.27	112.93	92.35	102.14	102.14	126.83	88.36	96.56	91.03
2400	109.09	109.55	92.11	98.51	98.51	107.98	88.54	96.33	90.93
2600	111.61	100.38	93.13	113.05	113.05	106.00	88.33	98.55	90.75
2800	115.51	100.49	92.05	100.47	100.47	97.49	86.20	97.25	90.07
3000	107.67	102.48	92.47	103.09	103.09	98.49	86.41	97.71	89.58
3200	113.65	97.79	89.90	100.89	100.89	92.44	86.86	94.23	89.33
3400	116.97	98.46	89.97	113.17	113.17	91.25	87.02	96.06	90.13
3600	118.25	98.94	87.94	105.01	105.01	89.95	86.11	94.15	88.41
3800	118.51	97.02	87.02	106.64	106.64	88.78	85.15	95.23	89.15
4000	115.29	95.03	86.74	110.38	110.38	88.72	84.49	95.00	89.62
4200	109.93	95.56	87.06	106.33	106.33	88.49	83.82	94.11	88.67
4400	110.48	92.46	85.73	101.86	101.86	87.18	83.54	94.14	88.47
4600	110.48	91.95	85.49	102.32	102.32	86.11	83.81	96.57	88.64
4800	109.64	90.79	84.80	97.50	97.50	84.85	83.21	95.42	88.77
5000	112.27	90.30	84.28	97.57	97.57	84.02	83.63	99.51	87.23
5200	112.74	89.66	84.89	97.43	97.43	83.36	84.85	96.57	87.55
5400	105.64	89.72	84.83	98.01	98.01	83.10	86.84	94.96	86.12
5600	117.77	89.34	84.35	97.93	97.93	82.77	88.96	96.03	85.54
5800	112.84	89.58	84.82	94.67	94.67	82.37	92.77	100.10	85.45
6000	112.77	88.39	83.87	98.12	98.12	82.42	95.22	101.92	84.21
6200	106.07	87.71	83.80	94.64	94.64	82.19	96.02	99.99	83.89
6400	108.43	87.07	82.69	95.34	95.34	81.41	91.79	98.30	83.27
6600	117.09	85.68	81.92	92.11	92.11	80.50	87.40	98.67	82.39
6800	107.54	84.37	81.43	91.30	91.30	79.79	83.19	94.56	81.67
7000	103.33	83.86	80.59	89.45	89.45	78.78	80.90	94.27	80.58
7200	105.41	81.40	79.19	87.12	87.12	77.60	78.60	93.40	80.15
7400	102.11	80.10	77.77	84.28	84.28	76.25	76.54	91.97	79.87
7600	99.04	79.45	76.39	82.39	82.39	74.68	75.36	94.16	80.50
7800	98.23	78.40	74.50	81.46	81.46	73.18	74.15	91.30	80.09
8000	98.08	76.93	72.65	79.93	79.93	71.74	74.06	91.42	80.65
8200	96.88	77.03	71.05	78.57	78.57	70.34	73.52	89.17	81.30
8400	93.44	75.48	69.70	78.50	78.50	69.05	72.54	89.42	82.16
8500	96.44	74.29	68.90	77.49	77.49	68.25	72.23	88.94	82.07

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = 0°C, Pin=8dBm

FREQUENCY (MHz)	ISOLATION between adjacent ports								
	(dB)								
	J1-J2 @J1 Active	J3-J4 @J3 Active	J5-J6 @J5 Active	J6-J7 @J6 Active	J8-J9 @J8 Active	J10-J11 @J10 Active	J12-J13 @J12 Active	J14-J15 @J14 Active	J15-J16 @J15 Active
0.1	94.45	95.05	106.40	101.09	96.07	98.05	101.50	91.04	97.50
0.5	92.72	97.79	94.25	98.05	99.08	97.90	101.20	97.29	95.77
1	99.75	100.38	100.24	94.18	104.09	93.25	101.78	94.11	100.24
5	93.38	94.07	96.38	95.36	109.12	90.44	91.93	98.35	96.91
10	101.85	96.96	96.62	98.61	98.03	98.18	102.00	97.88	93.95
20	98.27	93.92	93.44	95.54	95.47	96.14	97.57	97.28	93.23
50	103.78	89.64	90.36	91.54	92.11	95.82	96.17	94.73	93.33
100	105.06	87.22	88.84	90.18	89.84	94.15	94.61	92.48	92.16
200	102.16	85.69	88.09	88.97	87.94	91.67	93.88	92.23	91.96
400	109.90	85.07	87.61	88.31	86.12	90.82	90.62	90.06	91.58
600	110.02	85.92	88.09	89.08	85.53	89.66	89.96	89.47	91.02
800	113.15	84.20	88.58	90.91	86.50	90.36	89.99	87.66	89.22
1000	132.54	84.43	91.05	92.09	87.02	90.12	89.94	87.00	88.14
1200	108.42	84.07	89.55	93.13	86.24	89.99	89.16	87.94	88.74
1400	105.16	84.04	90.56	93.02	86.47	89.81	89.74	86.67	87.11
1600	101.94	83.97	90.07	92.91	87.43	88.99	90.24	86.35	87.98
1800	104.91	85.88	91.33	93.31	87.39	89.72	91.48	86.39	88.80
2000	104.24	87.16	90.79	94.42	86.55	89.92	91.05	85.59	88.92
2200	102.48	88.82	91.52	93.66	86.00	89.46	89.33	85.57	89.94
2400	97.70	89.56	92.99	93.15	86.02	89.64	89.29	85.63	89.22
2600	98.02	88.05	95.18	92.69	86.62	88.36	90.02	85.00	86.68
2800	97.44	86.34	98.65	92.50	86.08	88.95	89.60	84.68	85.61
3000	96.70	84.73	107.03	92.69	86.38	88.08	90.22	84.19	83.30
3200	95.67	84.30	106.41	93.63	87.06	88.25	90.33	84.22	82.70
3400	93.71	83.13	97.75	96.31	86.46	88.67	89.16	84.24	81.47
3600	94.03	82.80	94.57	100.64	85.55	90.28	88.76	83.54	81.23
3800	94.54	83.55	91.75	103.02	85.94	92.26	89.72	83.19	81.81
4000	93.71	84.16	91.22	100.21	84.97	93.25	89.07	81.49	81.58
4200	92.92	84.31	88.09	97.26	85.59	97.42	88.35	80.63	81.22
4400	92.53	85.34	87.82	95.13	85.65	105.26	87.17	79.70	83.39
4600	94.16	85.12	87.07	90.98	86.39	95.89	89.17	78.28	82.77
4800	90.09	83.81	88.54	88.79	86.64	92.23	89.12	78.05	81.97
5000	88.81	85.74	89.77	87.79	86.29	90.02	89.23	77.23	82.88
5200	90.49	83.01	89.49	86.21	85.09	87.82	90.12	76.13	80.53
5400	89.23	83.59	88.14	85.62	85.51	86.91	91.59	76.77	80.22
5600	87.17	86.72	89.53	84.73	87.26	85.00	91.00	75.79	81.51
5800	88.09	84.17	91.49	84.41	86.97	83.33	89.33	75.85	80.24
6000	91.09	85.29	90.80	84.49	87.21	83.18	92.07	76.76	81.22
6200	87.47	89.99	91.22	84.95	88.34	82.46	92.45	76.19	83.02
6400	86.89	85.26	89.07	84.13	89.01	82.10	91.90	77.20	82.31
6600	86.51	85.85	86.11	83.56	88.93	81.47	89.51	78.60	82.62
6800	87.47	83.20	84.64	82.73	90.04	81.19	89.86	78.66	81.65
7000	87.12	81.03	82.93	81.59	88.26	80.67	88.06	79.48	79.76
7200	84.41	79.04	83.96	80.96	87.11	80.23	87.79	79.01	77.80
7400	82.19	77.13	83.51	79.32	88.08	79.28	86.77	77.72	76.05
7600	82.23	77.76	81.14	77.13	87.32	77.41	86.68	74.75	75.83
7800	79.61	74.83	79.94	74.64	85.76	75.72	85.51	73.91	73.77
8000	75.87	73.61	79.73	72.83	90.26	74.14	85.05	71.23	72.52
8200	74.12	77.97	80.81	71.40	88.00	72.99	84.85	68.98	74.82
8400	73.72	77.89	82.42	70.35	84.66	71.70	83.71	67.59	74.72
8500	74.76	75.39	81.85	69.77	83.68	71.09	83.16	66.85	73.86

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +25°C, Pin=8dBm

FREQUENCY (MHz)	INSERTION LOSS							
	(dB)							
	COM-J1	COM-J2	COM-J3	COM-J4	COM-J5	COM-J6	COM-J7	COM-J8
0.1	4.83	4.80	4.84	4.82	4.85	4.80	4.79	4.82
0.5	4.17	4.14	4.17	4.17	4.18	4.14	4.13	4.15
1	4.15	4.12	4.15	4.15	4.16	4.12	4.11	4.13
5	4.16	4.12	4.15	4.15	4.16	4.12	4.11	4.13
10	4.16	4.13	4.16	4.16	4.16	4.12	4.12	4.13
20	4.17	4.14	4.17	4.17	4.17	4.13	4.12	4.14
50	4.21	4.17	4.21	4.20	4.20	4.15	4.15	4.17
100	4.28	4.24	4.27	4.28	4.24	4.19	4.19	4.21
200	4.44	4.39	4.42	4.44	4.32	4.27	4.26	4.29
400	4.71	4.65	4.68	4.70	4.51	4.43	4.41	4.46
600	4.76	4.70	4.73	4.75	4.70	4.59	4.58	4.65
800	4.86	4.75	4.78	4.86	4.84	4.74	4.73	4.80
1000	5.14	5.01	5.05	5.14	4.94	4.84	4.82	4.89
1200	5.32	5.21	5.24	5.30	5.01	4.89	4.87	4.95
1400	5.40	5.23	5.27	5.39	5.10	4.93	4.90	5.03
1600	5.61	5.41	5.45	5.60	5.22	5.01	4.98	5.15
1800	5.83	5.70	5.74	5.81	5.34	5.15	5.12	5.29
2000	5.97	5.80	5.83	5.96	5.46	5.31	5.29	5.42
2200	6.07	5.87	5.92	6.05	5.58	5.46	5.44	5.53
2400	6.18	6.10	6.13	6.17	5.70	5.57	5.54	5.64
2600	6.36	6.25	6.28	6.34	5.80	5.64	5.62	5.72
2800	6.45	6.35	6.39	6.44	5.86	5.73	5.71	5.78
3000	6.55	6.49	6.52	6.55	5.93	5.82	5.79	5.86
3200	6.73	6.58	6.61	6.72	6.08	5.89	5.87	6.02
3400	6.82	6.68	6.71	6.82	6.21	5.95	5.92	6.15
3600	7.05	6.71	6.76	7.04	6.23	6.01	5.99	6.17
3800	7.14	6.78	6.84	7.13	6.23	6.07	6.06	6.19
4000	7.17	6.87	6.93	7.16	6.34	6.06	6.04	6.32
4200	7.37	6.80	6.87	7.36	6.49	5.98	5.97	6.48
4400	7.36	6.95	7.00	7.38	6.51	5.97	5.95	6.50
4600	7.45	7.19	7.24	7.47	6.49	6.17	6.14	6.47
4800	7.46	7.03	7.11	7.49	6.68	6.46	6.43	6.61
5000	7.58	7.35	7.36	7.61	6.90	6.59	6.55	6.84
5200	8.15	7.84	7.86	8.19	6.86	6.49	6.45	6.84
5400	8.05	7.72	7.75	8.11	6.77	6.46	6.41	6.73
5600	8.37	8.06	8.06	8.39	7.10	6.75	6.74	7.00
5800	9.07	8.60	8.67	9.14	7.68	7.19	7.21	7.58
6000	8.91	8.49	8.55	8.94	7.92	7.40	7.41	7.85
6200	8.93	8.54	8.60	8.96	7.82	7.35	7.35	7.73
6400	9.12	8.77	8.86	9.16	7.70	7.27	7.26	7.60
6600	9.06	8.73	8.78	9.05	7.69	7.31	7.28	7.60
6800	9.00	8.72	8.74	9.01	7.67	7.38	7.32	7.61
7000	9.10	8.80	8.79	9.10	7.78	7.40	7.34	7.71
7200	9.25	8.92	8.94	9.25	8.01	7.48	7.46	7.93
7400	9.53	9.17	9.15	9.54	8.09	7.62	7.63	8.00
7600	10.25	9.64	9.54	10.31	8.18	7.77	7.79	8.11
7800	10.44	9.97	9.92	10.44	8.70	8.06	8.06	8.66
8000	10.60	10.22	10.08	10.62	9.45	8.57	8.55	9.39
8200	11.48	10.85	10.70	11.43	9.97	9.11	9.10	9.87
8400	11.95	11.26	11.25	11.74	10.15	9.40	9.44	10.02
8500	11.88	11.30	11.26	11.70	10.15	9.45	9.50	10.04

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +25°C, Pin=8dBm

FREQUENCY (MHz)	INSERTION LOSS							
	(dB)							
	COM-J9	COM-J10	COM-J11	COM-J12	COM-J13	COM-J14	COM-J15	COM-J16
0.1	4.85	4.85	4.86	4.84	4.81	4.88	4.84	4.83
0.5	4.18	4.18	4.21	4.19	4.15	4.24	4.18	4.19
1	4.16	4.15	4.19	4.17	4.12	4.21	4.16	4.17
5	4.16	4.15	4.19	4.17	4.13	4.22	4.16	4.17
10	4.16	4.16	4.19	4.18	4.13	4.22	4.17	4.18
20	4.17	4.17	4.20	4.19	4.15	4.23	4.18	4.19
50	4.20	4.19	4.23	4.21	4.18	4.27	4.21	4.22
100	4.24	4.23	4.27	4.26	4.25	4.34	4.28	4.30
200	4.32	4.31	4.34	4.34	4.41	4.49	4.42	4.45
400	4.50	4.46	4.50	4.52	4.65	4.74	4.67	4.70
600	4.69	4.63	4.67	4.70	4.70	4.77	4.70	4.74
800	4.84	4.77	4.82	4.85	4.81	4.86	4.77	4.86
1000	4.93	4.87	4.92	4.95	5.11	5.15	5.07	5.17
1200	5.00	4.92	4.96	5.01	5.29	5.34	5.27	5.34
1400	5.07	4.95	4.99	5.08	5.34	5.35	5.26	5.39
1600	5.19	5.02	5.05	5.19	5.52	5.49	5.41	5.57
1800	5.33	5.15	5.19	5.32	5.74	5.76	5.69	5.79
2000	5.45	5.33	5.38	5.46	5.88	5.88	5.80	5.93
2200	5.56	5.48	5.54	5.58	5.98	5.96	5.88	6.03
2400	5.67	5.59	5.64	5.69	6.10	6.19	6.11	6.16
2600	5.76	5.66	5.72	5.77	6.28	6.35	6.27	6.34
2800	5.82	5.75	5.81	5.84	6.38	6.45	6.38	6.44
3000	5.92	5.84	5.91	5.94	6.50	6.58	6.51	6.54
3200	6.09	5.92	5.96	6.11	6.67	6.68	6.61	6.71
3400	6.22	5.97	6.00	6.25	6.77	6.78	6.71	6.82
3600	6.24	6.02	6.07	6.26	7.02	6.82	6.77	7.07
3800	6.25	6.08	6.12	6.26	7.12	6.92	6.87	7.18
4000	6.37	6.08	6.07	6.37	7.14	7.01	6.97	7.18
4200	6.51	6.03	5.97	6.52	7.34	6.90	6.88	7.39
4400	6.52	6.03	5.99	6.57	7.36	7.08	7.03	7.41
4600	6.51	6.20	6.24	6.58	7.46	7.31	7.27	7.49
4800	6.68	6.47	6.54	6.73	7.48	7.15	7.13	7.52
5000	6.88	6.60	6.61	6.92	7.63	7.54	7.45	7.67
5200	6.82	6.52	6.46	6.89	8.22	8.05	7.98	8.28
5400	6.74	6.46	6.48	6.81	8.13	7.89	7.85	8.20
5600	7.11	6.74	6.88	7.16	8.35	8.22	8.13	8.39
5800	7.70	7.20	7.34	7.73	9.05	8.72	8.69	9.09
6000	7.92	7.45	7.49	7.97	8.94	8.63	8.62	8.97
6200	7.80	7.40	7.39	7.86	9.00	8.72	8.69	8.99
6400	7.67	7.29	7.32	7.73	9.19	8.91	8.91	9.20
6600	7.63	7.32	7.32	7.71	9.12	8.88	8.85	9.14
6800	7.63	7.40	7.32	7.74	9.08	8.88	8.83	9.11
7000	7.79	7.44	7.37	7.92	9.17	8.96	8.90	9.21
7200	8.04	7.54	7.53	8.14	9.33	9.10	9.07	9.35
7400	8.09	7.70	7.69	8.20	9.58	9.32	9.29	9.60
7600	8.18	7.86	7.82	8.32	10.29	9.77	9.70	10.29
7800	8.68	8.12	8.10	8.84	10.48	10.12	10.06	10.48
8000	9.35	8.59	8.61	9.50	10.70	10.38	10.26	10.69
8200	9.81	9.10	9.12	9.97	11.54	10.98	10.87	11.52
8400	10.01	9.40	9.42	10.18	11.89	11.38	11.35	11.86
8500	10.04	9.47	9.48	10.22	11.86	11.43	11.39	11.83

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +25°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Active Ports								
	(:1)								
	COM	J1	J2	J3	J4	J5	J6	J7	J8
0.1	2.04	2.02	2.01	2.03	2.01	2.04	2.01	2.01	2.03
0.5	1.31	1.31	1.30	1.31	1.30	1.31	1.30	1.30	1.30
1	1.27	1.27	1.26	1.27	1.27	1.27	1.26	1.26	1.26
5	1.25	1.26	1.25	1.26	1.25	1.26	1.25	1.25	1.25
10	1.25	1.26	1.25	1.26	1.25	1.26	1.25	1.25	1.25
20	1.25	1.26	1.25	1.26	1.26	1.26	1.25	1.25	1.25
50	1.25	1.26	1.25	1.26	1.26	1.26	1.25	1.25	1.25
100	1.25	1.25	1.25	1.25	1.25	1.27	1.26	1.26	1.26
200	1.19	1.21	1.20	1.21	1.21	1.27	1.26	1.26	1.26
400	1.02	1.03	1.04	1.04	1.03	1.25	1.24	1.24	1.24
600	1.21	1.19	1.17	1.17	1.18	1.18	1.18	1.18	1.17
800	1.31	1.28	1.30	1.31	1.28	1.06	1.08	1.08	1.06
1000	1.18	1.12	1.18	1.19	1.15	1.06	1.04	1.03	1.04
1200	1.11	1.08	1.06	1.06	1.05	1.15	1.16	1.15	1.12
1400	1.21	1.12	1.25	1.26	1.15	1.16	1.26	1.24	1.15
1600	1.16	1.20	1.23	1.24	1.21	1.14	1.29	1.27	1.16
1800	1.04	1.26	1.07	1.07	1.22	1.21	1.23	1.22	1.22
2000	1.04	1.10	1.09	1.10	1.08	1.28	1.13	1.14	1.27
2200	1.06	1.26	1.08	1.10	1.23	1.27	1.06	1.08	1.26
2400	1.02	1.33	1.14	1.12	1.32	1.20	1.07	1.07	1.19
2600	1.20	1.19	1.15	1.12	1.19	1.18	1.06	1.06	1.16
2800	1.28	1.19	1.15	1.11	1.19	1.19	1.09	1.09	1.17
3000	1.12	1.12	1.25	1.21	1.14	1.14	1.17	1.17	1.13
3200	1.42	1.04	1.24	1.22	1.04	1.04	1.21	1.21	1.03
3400	1.57	1.04	1.28	1.26	1.01	1.11	1.18	1.19	1.06
3600	1.29	1.18	1.30	1.32	1.14	1.14	1.15	1.16	1.09
3800	1.52	1.23	1.18	1.22	1.21	1.07	1.25	1.26	1.04
4000	1.58	1.19	1.27	1.31	1.16	1.18	1.42	1.41	1.17
4200	1.37	1.41	1.36	1.44	1.41	1.41	1.51	1.50	1.38
4400	1.43	1.36	1.15	1.22	1.44	1.52	1.42	1.40	1.51
4600	1.31	1.12	1.13	1.19	1.19	1.39	1.18	1.18	1.44
4800	1.35	1.35	1.30	1.39	1.44	1.12	1.07	1.06	1.18
5000	1.14	1.26	1.21	1.19	1.31	1.13	1.27	1.25	1.12
5200	1.23	1.06	1.08	1.12	1.08	1.29	1.36	1.36	1.31
5400	1.30	1.18	1.21	1.27	1.26	1.24	1.28	1.27	1.31
5600	1.17	1.14	1.23	1.12	1.06	1.08	1.10	1.12	1.10
5800	1.56	1.23	1.15	1.19	1.35	1.21	1.18	1.18	1.20
6000	1.48	1.18	1.13	1.19	1.27	1.34	1.27	1.27	1.34
6200	1.36	1.08	1.08	1.05	1.21	1.29	1.25	1.22	1.32
6400	1.52	1.27	1.12	1.23	1.39	1.17	1.14	1.11	1.19
6600	1.49	1.26	1.16	1.20	1.25	1.19	1.15	1.15	1.21
6800	1.41	1.22	1.13	1.15	1.17	1.22	1.22	1.21	1.23
7000	1.24	1.25	1.20	1.16	1.11	1.17	1.19	1.17	1.15
7200	1.24	1.21	1.19	1.12	1.07	1.08	1.10	1.07	1.06
7400	1.51	1.29	1.34	1.23	1.17	1.05	1.05	1.04	1.02
7600	1.56	1.12	1.45	1.26	1.16	1.17	1.18	1.16	1.15
7800	1.34	1.18	1.27	1.09	1.04	1.19	1.37	1.33	1.23
8000	1.50	1.22	1.48	1.25	1.11	1.09	1.49	1.45	1.15
8200	1.63	1.27	1.59	1.38	1.11	1.20	1.43	1.42	1.13
8400	1.35	1.67	1.32	1.18	1.42	1.43	1.25	1.27	1.34
8500	1.18	1.71	1.33	1.13	1.47	1.51	1.19	1.21	1.43

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +25°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Active Ports							
	(:1)							
	J9	J10	J11	J12	J13	J14	J15	J16
0.1	2.04	2.03	2.01	2.01	2.02	2.01	2.02	2.00
0.5	1.31	1.31	1.31	1.31	1.30	1.32	1.31	1.31
1	1.27	1.27	1.28	1.27	1.26	1.28	1.27	1.27
5	1.26	1.25	1.26	1.26	1.25	1.27	1.26	1.26
10	1.26	1.25	1.26	1.26	1.25	1.27	1.26	1.26
20	1.26	1.26	1.27	1.26	1.25	1.27	1.26	1.26
50	1.26	1.26	1.27	1.26	1.25	1.27	1.26	1.26
100	1.27	1.26	1.27	1.27	1.25	1.26	1.25	1.26
200	1.28	1.27	1.27	1.27	1.22	1.22	1.21	1.21
400	1.26	1.25	1.25	1.25	1.05	1.04	1.04	1.04
600	1.17	1.18	1.18	1.17	1.19	1.20	1.18	1.19
800	1.05	1.08	1.07	1.04	1.30	1.33	1.31	1.29
1000	1.07	1.05	1.07	1.07	1.14	1.17	1.18	1.14
1200	1.15	1.17	1.19	1.15	1.09	1.10	1.07	1.08
1400	1.15	1.27	1.27	1.16	1.18	1.31	1.28	1.18
1600	1.15	1.30	1.25	1.14	1.21	1.23	1.26	1.20
1800	1.24	1.25	1.17	1.21	1.24	1.05	1.08	1.23
2000	1.32	1.15	1.12	1.30	1.09	1.12	1.08	1.09
2200	1.30	1.09	1.14	1.30	1.25	1.04	1.09	1.24
2400	1.23	1.08	1.16	1.23	1.32	1.16	1.14	1.34
2600	1.19	1.08	1.15	1.19	1.18	1.20	1.15	1.20
2800	1.18	1.12	1.20	1.18	1.17	1.19	1.13	1.19
3000	1.11	1.19	1.27	1.12	1.11	1.28	1.22	1.13
3200	1.02	1.22	1.28	1.01	1.02	1.28	1.22	1.06
3400	1.10	1.18	1.22	1.09	1.03	1.33	1.28	1.03
3600	1.12	1.13	1.19	1.12	1.17	1.33	1.31	1.17
3800	1.07	1.22	1.28	1.06	1.20	1.20	1.19	1.23
4000	1.20	1.37	1.40	1.17	1.14	1.31	1.30	1.16
4200	1.40	1.48	1.44	1.38	1.37	1.36	1.39	1.39
4400	1.50	1.46	1.33	1.51	1.35	1.12	1.16	1.39
4600	1.40	1.28	1.15	1.45	1.13	1.16	1.17	1.15
4800	1.16	1.05	1.07	1.21	1.38	1.28	1.34	1.38
5000	1.07	1.17	1.18	1.05	1.29	1.18	1.16	1.31
5200	1.23	1.32	1.24	1.22	1.06	1.10	1.13	1.04
5400	1.23	1.32	1.21	1.24	1.22	1.21	1.25	1.22
5600	1.13	1.18	1.19	1.14	1.10	1.20	1.14	1.13
5800	1.21	1.14	1.21	1.20	1.22	1.12	1.16	1.20
6000	1.30	1.19	1.21	1.28	1.18	1.14	1.15	1.18
6200	1.25	1.18	1.13	1.25	1.12	1.08	1.06	1.08
6400	1.14	1.06	1.05	1.13	1.28	1.11	1.18	1.26
6600	1.16	1.08	1.05	1.14	1.19	1.15	1.15	1.22
6800	1.22	1.13	1.12	1.21	1.14	1.13	1.11	1.18
7000	1.21	1.11	1.20	1.24	1.14	1.20	1.15	1.20
7200	1.12	1.10	1.19	1.18	1.11	1.19	1.12	1.16
7400	1.09	1.06	1.12	1.12	1.19	1.36	1.26	1.25
7600	1.22	1.06	1.28	1.27	1.11	1.42	1.27	1.13
7800	1.22	1.29	1.54	1.31	1.10	1.27	1.13	1.12
8000	1.06	1.50	1.63	1.13	1.16	1.55	1.35	1.20
8200	1.20	1.53	1.48	1.15	1.11	1.58	1.39	1.10
8400	1.44	1.40	1.31	1.43	1.42	1.34	1.16	1.43
8500	1.52	1.33	1.31	1.52	1.46	1.41	1.19	1.50

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +25°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Terminated Ports								
	(:1)								
	COM	J1	J2	J3	J4	J5	J6	J7	J8
0.1	2.01	1.48	1.56	1.55	1.52	1.57	1.53	1.53	1.58
0.5	1.26	1.16	1.27	1.23	1.21	1.25	1.24	1.24	1.28
1	1.22	1.14	1.26	1.22	1.20	1.23	1.23	1.22	1.26
5	1.20	1.14	1.25	1.22	1.20	1.23	1.23	1.22	1.26
10	1.20	1.14	1.25	1.22	1.20	1.23	1.22	1.22	1.26
20	1.20	1.14	1.25	1.22	1.20	1.23	1.22	1.22	1.26
50	1.20	1.13	1.25	1.21	1.19	1.23	1.22	1.22	1.26
100	1.19	1.13	1.25	1.21	1.19	1.23	1.22	1.22	1.25
200	1.19	1.13	1.24	1.21	1.19	1.22	1.22	1.21	1.25
400	1.18	1.12	1.24	1.20	1.18	1.21	1.21	1.21	1.24
600	1.17	1.12	1.22	1.19	1.17	1.21	1.20	1.20	1.23
800	1.17	1.11	1.21	1.18	1.17	1.20	1.20	1.19	1.23
1000	1.16	1.11	1.21	1.18	1.16	1.19	1.19	1.19	1.22
1200	1.15	1.10	1.20	1.17	1.16	1.18	1.19	1.18	1.21
1400	1.14	1.10	1.18	1.16	1.15	1.17	1.18	1.18	1.20
1600	1.13	1.09	1.17	1.15	1.14	1.16	1.18	1.17	1.19
1800	1.12	1.09	1.16	1.14	1.13	1.15	1.17	1.16	1.19
2000	1.12	1.08	1.14	1.13	1.12	1.13	1.16	1.15	1.17
2200	1.11	1.07	1.12	1.12	1.11	1.12	1.15	1.14	1.16
2400	1.10	1.07	1.11	1.10	1.10	1.11	1.14	1.13	1.14
2600	1.09	1.06	1.10	1.09	1.09	1.10	1.13	1.13	1.13
2800	1.09	1.06	1.09	1.08	1.08	1.08	1.12	1.12	1.12
3000	1.09	1.05	1.08	1.08	1.07	1.07	1.11	1.11	1.11
3200	1.08	1.04	1.09	1.07	1.06	1.06	1.10	1.10	1.11
3400	1.08	1.04	1.09	1.06	1.06	1.05	1.10	1.09	1.11
3600	1.09	1.03	1.10	1.06	1.05	1.04	1.09	1.08	1.10
3800	1.10	1.02	1.11	1.05	1.05	1.04	1.08	1.08	1.09
4000	1.11	1.02	1.11	1.05	1.05	1.03	1.08	1.07	1.08
4200	1.12	1.02	1.12	1.05	1.04	1.03	1.08	1.07	1.08
4400	1.13	1.02	1.13	1.05	1.04	1.03	1.07	1.06	1.07
4600	1.14	1.03	1.13	1.05	1.04	1.03	1.06	1.06	1.06
4800	1.15	1.03	1.13	1.04	1.03	1.02	1.06	1.05	1.05
5000	1.17	1.04	1.14	1.04	1.02	1.02	1.05	1.05	1.05
5200	1.18	1.05	1.15	1.04	1.02	1.02	1.04	1.04	1.05
5400	1.20	1.06	1.15	1.04	1.02	1.03	1.04	1.04	1.04
5600	1.20	1.07	1.16	1.04	1.01	1.03	1.04	1.03	1.05
5800	1.21	1.10	1.15	1.05	1.02	1.04	1.03	1.05	1.06
6000	1.20	1.11	1.17	1.05	1.01	1.05	1.05	1.05	1.06
6200	1.20	1.12	1.17	1.06	1.03	1.07	1.06	1.07	1.08
6400	1.20	1.15	1.18	1.07	1.05	1.08	1.08	1.09	1.10
6600	1.20	1.16	1.18	1.08	1.06	1.09	1.10	1.10	1.12
6800	1.19	1.19	1.19	1.10	1.09	1.11	1.12	1.12	1.13
7000	1.18	1.21	1.21	1.11	1.11	1.13	1.14	1.14	1.15
7200	1.17	1.25	1.23	1.14	1.14	1.15	1.17	1.17	1.17
7400	1.16	1.28	1.25	1.16	1.18	1.17	1.20	1.20	1.19
7600	1.14	1.32	1.28	1.18	1.21	1.19	1.23	1.23	1.22
7800	1.13	1.35	1.30	1.21	1.25	1.22	1.26	1.27	1.24
8000	1.12	1.39	1.34	1.24	1.30	1.26	1.30	1.31	1.27
8200	1.12	1.43	1.36	1.27	1.33	1.28	1.32	1.34	1.29
8400	1.12	1.47	1.38	1.29	1.36	1.31	1.34	1.38	1.30
8500	1.13	1.49	1.39	1.30	1.38	1.31	1.34	1.39	1.31

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +25°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Terminated Ports							
	(:1)							
	J9	J10	J11	J12	J13	J14	J15	J16
0.1	1.54	1.56	1.51	1.48	1.55	1.47	1.53	1.50
0.5	1.22	1.24	1.21	1.17	1.25	1.16	1.22	1.22
1	1.21	1.23	1.19	1.15	1.24	1.14	1.21	1.20
5	1.20	1.23	1.19	1.15	1.23	1.14	1.21	1.20
10	1.20	1.23	1.19	1.15	1.23	1.14	1.21	1.20
20	1.20	1.23	1.19	1.15	1.23	1.14	1.21	1.20
50	1.20	1.22	1.19	1.15	1.23	1.14	1.21	1.20
100	1.20	1.22	1.19	1.14	1.23	1.13	1.20	1.19
200	1.19	1.22	1.18	1.14	1.22	1.13	1.20	1.19
400	1.19	1.21	1.17	1.14	1.22	1.12	1.19	1.19
600	1.18	1.20	1.17	1.13	1.21	1.12	1.18	1.18
800	1.17	1.19	1.15	1.12	1.20	1.11	1.18	1.17
1000	1.16	1.19	1.15	1.12	1.19	1.11	1.17	1.17
1200	1.15	1.18	1.13	1.11	1.18	1.10	1.16	1.16
1400	1.14	1.17	1.12	1.11	1.17	1.10	1.15	1.15
1600	1.12	1.16	1.11	1.10	1.15	1.10	1.14	1.14
1800	1.11	1.15	1.10	1.10	1.14	1.09	1.13	1.13
2000	1.10	1.14	1.08	1.09	1.13	1.09	1.12	1.12
2200	1.09	1.13	1.07	1.09	1.11	1.08	1.10	1.11
2400	1.08	1.12	1.06	1.08	1.10	1.07	1.09	1.10
2600	1.07	1.11	1.05	1.07	1.09	1.07	1.08	1.09
2800	1.06	1.10	1.04	1.06	1.08	1.06	1.07	1.07
3000	1.05	1.09	1.04	1.06	1.07	1.05	1.07	1.06
3200	1.05	1.09	1.04	1.05	1.07	1.04	1.06	1.05
3400	1.04	1.09	1.04	1.05	1.06	1.03	1.05	1.04
3600	1.04	1.09	1.04	1.04	1.06	1.02	1.05	1.03
3800	1.04	1.08	1.05	1.05	1.06	1.01	1.05	1.02
4000	1.04	1.08	1.05	1.05	1.06	1.01	1.05	1.02
4200	1.04	1.08	1.05	1.05	1.06	1.02	1.06	1.03
4400	1.04	1.08	1.06	1.06	1.06	1.03	1.06	1.04
4600	1.04	1.07	1.06	1.06	1.06	1.05	1.06	1.04
4800	1.03	1.07	1.06	1.06	1.06	1.06	1.06	1.05
5000	1.04	1.06	1.07	1.05	1.06	1.08	1.07	1.05
5200	1.04	1.05	1.07	1.05	1.06	1.10	1.07	1.06
5400	1.04	1.04	1.08	1.05	1.07	1.11	1.08	1.06
5600	1.05	1.05	1.10	1.05	1.06	1.13	1.07	1.07
5800	1.06	1.05	1.12	1.05	1.08	1.14	1.09	1.07
6000	1.06	1.06	1.12	1.07	1.08	1.17	1.09	1.09
6200	1.09	1.08	1.15	1.08	1.10	1.18	1.10	1.10
6400	1.10	1.11	1.17	1.10	1.11	1.20	1.12	1.11
6600	1.11	1.13	1.18	1.13	1.12	1.22	1.12	1.13
6800	1.13	1.16	1.21	1.15	1.14	1.24	1.14	1.14
7000	1.14	1.18	1.23	1.18	1.15	1.26	1.15	1.15
7200	1.17	1.22	1.26	1.22	1.18	1.29	1.17	1.17
7400	1.19	1.25	1.29	1.26	1.20	1.32	1.19	1.20
7600	1.21	1.28	1.32	1.30	1.23	1.35	1.21	1.23
7800	1.25	1.32	1.35	1.34	1.26	1.39	1.23	1.27
8000	1.28	1.36	1.39	1.39	1.30	1.43	1.26	1.31
8200	1.31	1.38	1.42	1.42	1.32	1.46	1.27	1.34
8400	1.33	1.40	1.45	1.44	1.35	1.50	1.29	1.37
8500	1.34	1.41	1.46	1.45	1.36	1.51	1.29	1.38

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 www.minicircuits.com/VCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +25°C, Pin=8dBm

FREQUENCY (MHz)	ISOLATION COM to terminated port								
	(dB)								
	COM-J1 @J16 Active	COM-J2 @J1 Active	COM-J4 @J3 Active	COM-J5 @J6 Active	COM-J7 @J6 Active	COM-J8 @J7 Active	COM-J10 @J9 Active	COM-J13 @J12 Active	COM-J15 @J14 Active
0.1	95.55	95.25	97.00	105.90	105.90	110.23	109.91	98.47	103.68
0.5	97.04	95.42	108.17	96.94	96.94	100.28	98.84	99.41	96.84
1	105.57	104.30	105.42	96.88	96.88	92.32	95.85	94.22	97.49
5	115.48	94.81	99.45	97.30	97.30	97.06	96.41	104.52	91.22
10	115.11	111.26	104.12	103.03	103.03	107.81	106.63	103.22	100.03
20	124.43	102.85	97.40	98.15	98.15	103.42	103.54	100.91	99.94
50	121.65	101.82	94.58	97.53	97.53	99.65	99.12	100.05	99.38
100	137.11	102.43	92.82	94.79	94.79	96.98	100.45	99.73	97.96
200	127.40	110.59	92.83	94.87	94.87	96.77	96.43	99.33	97.41
400	110.21	109.99	92.39	95.20	95.20	97.97	98.44	95.89	96.38
600	115.07	111.44	93.05	95.13	95.13	98.11	95.71	95.44	94.40
800	122.92	114.31	93.65	95.52	95.52	99.21	95.97	96.92	93.27
1000	121.43	115.16	92.51	93.79	93.79	98.94	95.78	94.72	93.17
1200	114.32	113.55	92.41	95.27	95.27	101.19	99.52	95.15	92.68
1400	114.48	110.32	94.36	95.68	95.68	116.66	100.43	96.39	92.77
1600	114.96	109.31	93.16	97.26	97.26	134.00	97.25	94.96	92.08
1800	112.39	112.39	94.22	98.29	98.29	115.30	97.74	94.83	91.55
2000	114.13	115.91	93.98	98.48	98.48	119.93	101.75	94.62	91.97
2200	110.52	109.60	92.27	97.22	97.22	112.64	96.75	95.60	90.82
2400	117.81	100.96	92.75	97.66	97.66	104.03	95.19	93.84	91.19
2600	112.90	103.39	92.09	100.22	100.22	98.61	94.40	94.31	89.44
2800	107.64	102.48	90.32	98.80	98.80	96.72	96.24	94.08	91.24
3000	117.01	100.80	90.78	98.90	98.90	96.00	94.46	94.51	89.73
3200	119.59	103.72	89.20	101.91	101.91	92.13	95.65	92.62	89.30
3400	108.34	96.99	88.75	101.36	101.36	90.66	92.75	91.55	89.41
3600	105.04	98.07	87.37	105.71	105.71	90.87	92.05	91.47	88.48
3800	109.38	96.59	86.29	101.79	101.79	90.27	91.26	92.03	89.14
4000	116.08	93.92	87.30	106.90	106.90	89.55	89.74	92.39	89.11
4200	110.68	93.26	85.98	102.44	102.44	88.22	89.15	91.05	89.24
4400	105.82	93.38	85.23	99.60	99.60	86.86	87.75	90.85	88.95
4600	114.57	93.20	85.25	97.84	97.84	85.94	88.13	92.49	89.14
4800	106.86	90.21	85.13	96.14	96.14	84.79	87.48	92.63	87.29
5000	122.69	89.96	84.91	100.03	100.03	83.71	88.32	94.33	87.37
5200	108.74	90.24	84.81	95.21	95.21	83.33	87.03	93.82	89.07
5400	109.70	89.70	85.02	94.84	94.84	82.17	88.49	94.04	88.09
5600	113.79	89.11	85.24	95.82	95.82	82.65	90.77	94.82	86.86
5800	106.22	89.46	85.16	93.43	93.43	82.40	91.11	94.70	86.44
6000	122.78	89.45	84.12	94.10	94.10	82.52	93.62	95.11	85.35
6200	110.82	87.89	83.85	92.61	92.61	82.18	94.26	97.08	85.02
6400	115.24	87.59	83.11	91.51	91.51	81.52	90.49	96.42	83.99
6600	106.79	85.81	82.28	90.61	90.61	80.58	89.27	95.78	82.83
6800	109.19	84.32	81.31	89.41	89.41	79.68	84.84	94.19	82.71
7000	101.43	82.69	79.91	88.34	88.34	78.27	82.12	93.95	81.68
7200	102.78	81.34	78.86	85.66	85.66	76.97	80.39	93.13	80.95
7400	105.13	79.88	77.42	83.59	83.59	75.73	78.24	91.46	81.00
7600	105.01	79.44	75.88	81.57	81.57	74.05	76.71	90.72	81.79
7800	99.55	78.10	74.50	80.94	80.94	72.76	75.73	89.52	80.98
8000	107.64	77.01	72.45	79.73	79.73	71.37	75.16	89.35	82.14
8200	97.40	76.50	70.99	79.01	79.01	70.21	74.30	88.21	83.67
8400	95.47	75.40	69.82	77.86	77.86	68.93	73.53	86.90	84.11
8500	95.32	74.28	68.99	76.90	76.90	68.35	72.99	87.03	83.65

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +25°C, Pin=8dBm

FREQUENCY (MHz)	ISOLATION between adjacent ports								
	(dB)								
	J1-J2 @J1 Active	J3-J4 @J3 Active	J5-J6 @J5 Active	J6-J7 @J6 Active	J8-J9 @J8 Active	J10-J11 @J10 Active	J12-J13 @J12 Active	J14-J15 @J14 Active	J15-J16 @J15 Active
0.1	114.95	99.41	109.29	105.32	100.21	92.71	93.52	96.58	94.54
0.5	98.54	101.37	93.16	95.87	103.60	98.52	98.38	94.80	102.35
1	96.87	107.96	95.83	97.58	95.60	98.79	93.94	96.18	97.42
5	99.40	96.34	96.22	100.94	101.96	93.02	101.98	98.13	97.89
10	102.42	96.72	99.52	98.51	100.07	105.59	99.93	95.96	99.04
20	98.11	93.63	94.39	96.13	96.65	98.84	98.15	97.07	95.40
50	99.86	91.12	92.10	92.64	94.95	96.44	99.16	94.26	97.08
100	99.00	89.22	90.43	90.71	93.46	96.76	96.13	94.07	96.24
200	104.63	87.90	89.88	90.89	92.47	96.11	95.34	94.41	95.37
400	110.80	87.96	88.66	89.04	90.79	93.75	92.02	90.68	94.01
600	104.00	88.10	90.25	90.74	89.88	94.22	90.59	90.16	94.92
800	106.00	87.21	91.72	90.37	91.64	95.50	91.47	88.42	92.95
1000	108.84	86.28	91.61	92.27	90.98	96.09	90.47	88.20	92.60
1200	105.23	86.02	90.92	91.46	89.51	96.42	89.61	88.09	92.31
1400	105.66	85.65	91.52	91.06	90.48	95.62	89.64	86.14	91.74
1600	102.91	86.39	91.59	91.76	91.55	94.84	90.50	86.32	94.00
1800	103.13	87.84	92.40	93.23	91.22	94.31	89.94	86.46	94.90
2000	102.68	88.45	91.84	92.14	89.32	98.05	88.74	85.14	98.56
2200	99.44	88.63	92.11	91.48	88.54	94.42	87.85	84.95	103.22
2400	101.36	90.07	93.89	90.83	87.74	93.92	87.91	84.89	101.54
2600	100.01	88.00	94.76	91.42	89.52	93.05	86.87	83.80	93.88
2800	101.56	86.10	97.00	90.64	88.73	91.36	87.27	84.06	92.46
3000	99.13	84.38	104.86	90.66	88.14	92.94	87.08	83.69	89.39
3200	95.38	82.90	104.37	91.30	88.84	93.59	87.54	82.99	87.91
3400	95.91	82.40	96.52	93.07	88.31	93.35	86.53	82.77	86.75
3600	93.78	81.96	94.39	97.51	87.00	96.22	86.36	82.44	86.94
3800	93.82	82.67	91.02	101.85	86.74	96.55	85.91	82.66	88.63
4000	91.81	82.48	89.03	110.65	86.29	98.45	85.58	81.39	89.61
4200	91.90	82.59	87.70	100.40	84.71	98.84	83.86	80.89	89.27
4400	92.51	84.07	86.64	93.20	85.23	95.24	85.28	80.42	93.95
4600	92.18	83.81	87.08	90.46	86.63	93.08	86.29	79.03	92.34
4800	90.54	82.42	88.14	88.19	86.86	91.43	86.67	78.77	89.20
5000	89.76	84.04	88.99	87.24	85.89	90.01	85.61	77.46	94.87
5200	90.68	81.94	89.58	85.40	85.49	88.35	86.19	76.59	86.96
5400	90.88	82.38	88.59	84.30	86.83	86.89	88.04	77.10	87.73
5600	87.76	84.71	90.30	83.31	87.04	85.33	87.36	76.15	93.81
5800	88.85	82.99	91.20	82.98	85.19	84.25	86.67	76.14	88.42
6000	91.75	84.88	91.36	83.14	85.73	84.26	87.74	76.97	92.95
6200	88.19	89.27	92.57	83.71	85.80	83.95	89.33	76.49	92.73
6400	86.60	86.27	89.50	83.11	86.23	83.31	89.57	77.40	88.79
6600	87.75	86.46	86.82	82.62	85.51	82.42	88.20	78.52	89.42
6800	85.47	84.19	84.58	82.19	86.10	81.58	88.05	79.33	84.31
7000	84.45	81.91	83.67	81.58	84.67	80.69	86.61	80.05	82.45
7200	83.10	78.92	83.58	81.22	83.27	79.94	84.70	80.64	80.04
7400	80.75	77.23	82.74	79.34	83.73	78.46	85.11	80.48	79.04
7600	80.84	77.74	80.49	77.04	82.85	76.87	83.31	76.89	79.49
7800	79.87	74.60	79.24	74.63	82.62	74.86	82.51	75.67	76.31
8000	76.31	73.84	79.26	72.69	83.79	73.33	82.98	72.39	76.27
8200	75.73	78.46	81.42	71.51	83.56	72.13	82.80	70.11	80.66
8400	76.98	78.14	81.71	70.14	81.26	70.92	81.29	68.51	79.80
8500	76.53	75.23	81.24	69.50	80.49	70.32	81.78	67.70	77.24

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +50°C, Pin=8dBm

FREQUENCY (MHz)	INSERTION LOSS							
	(dB)							
	COM-J1	COM-J2	COM-J3	COM-J4	COM-J5	COM-J6	COM-J7	COM-J8
0.1	4.89	4.86	4.90	4.89	4.92	4.86	4.85	4.89
0.5	4.26	4.23	4.26	4.25	4.26	4.22	4.21	4.23
1	4.24	4.20	4.23	4.23	4.24	4.20	4.19	4.21
5	4.24	4.21	4.24	4.24	4.24	4.20	4.19	4.21
10	4.25	4.21	4.24	4.24	4.25	4.20	4.19	4.22
20	4.26	4.23	4.26	4.26	4.26	4.21	4.20	4.23
50	4.29	4.26	4.29	4.29	4.28	4.23	4.23	4.25
100	4.37	4.33	4.36	4.36	4.32	4.27	4.26	4.29
200	4.54	4.49	4.52	4.53	4.41	4.35	4.34	4.37
400	4.82	4.75	4.79	4.81	4.61	4.52	4.51	4.56
600	4.86	4.80	4.82	4.85	4.80	4.69	4.68	4.75
800	4.97	4.86	4.88	4.97	4.95	4.85	4.83	4.91
1000	5.25	5.12	5.16	5.25	5.04	4.94	4.92	5.00
1200	5.42	5.32	5.34	5.42	5.11	4.99	4.97	5.06
1400	5.50	5.34	5.37	5.50	5.20	5.02	5.00	5.14
1600	5.71	5.51	5.56	5.71	5.32	5.10	5.07	5.26
1800	5.93	5.81	5.84	5.92	5.44	5.25	5.22	5.40
2000	6.07	5.91	5.93	6.06	5.56	5.41	5.39	5.51
2200	6.16	5.98	6.02	6.15	5.68	5.55	5.54	5.62
2400	6.27	6.20	6.23	6.26	5.80	5.65	5.64	5.74
2600	6.45	6.35	6.37	6.44	5.88	5.73	5.71	5.82
2800	6.54	6.46	6.48	6.53	5.94	5.82	5.80	5.88
3000	6.65	6.59	6.61	6.65	6.02	5.90	5.88	5.96
3200	6.81	6.67	6.70	6.81	6.17	5.97	5.95	6.12
3400	6.91	6.76	6.79	6.91	6.29	6.03	6.00	6.24
3600	7.14	6.81	6.84	7.14	6.31	6.10	6.07	6.26
3800	7.24	6.90	6.94	7.24	6.33	6.16	6.14	6.29
4000	7.27	6.98	7.02	7.28	6.46	6.14	6.12	6.43
4200	7.47	6.90	6.97	7.47	6.60	6.07	6.06	6.58
4400	7.48	7.08	7.12	7.50	6.62	6.09	6.06	6.60
4600	7.57	7.30	7.34	7.59	6.62	6.30	6.26	6.58
4800	7.58	7.16	7.22	7.60	6.81	6.58	6.54	6.74
5000	7.71	7.49	7.49	7.76	7.02	6.70	6.66	6.95
5200	8.29	7.97	8.00	8.33	6.98	6.60	6.56	6.94
5400	8.18	7.84	7.88	8.23	6.88	6.56	6.52	6.84
5600	8.51	8.22	8.22	8.55	7.24	6.88	6.87	7.14
5800	9.24	8.78	8.83	9.33	7.85	7.37	7.35	7.75
6000	9.06	8.66	8.70	9.11	8.08	7.58	7.55	8.03
6200	9.08	8.72	8.75	9.16	7.94	7.50	7.47	7.90
6400	9.25	8.93	8.99	9.32	7.81	7.40	7.38	7.76
6600	9.18	8.86	8.91	9.19	7.79	7.42	7.42	7.74
6800	9.14	8.85	8.89	9.14	7.79	7.46	7.46	7.73
7000	9.26	8.95	8.96	9.27	7.94	7.50	7.49	7.87
7200	9.44	9.13	9.13	9.45	8.19	7.64	7.64	8.13
7400	9.78	9.44	9.37	9.80	8.28	7.82	7.83	8.22
7600	10.51	9.95	9.81	10.59	8.44	8.01	8.02	8.39
7800	10.68	10.24	10.17	10.70	9.01	8.34	8.34	8.95
8000	10.85	10.48	10.35	10.90	9.75	8.86	8.85	9.69
8200	11.75	11.16	10.99	11.76	10.26	9.40	9.40	10.21
8400	12.20	11.62	11.54	12.14	10.44	9.73	9.73	10.41
8500	12.15	11.66	11.57	12.10	10.45	9.79	9.80	10.42

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +50°C, Pin=8dBm

FREQUENCY (MHz)	INSERTION LOSS							
	(dB)							
	COM-J9	COM-J10	COM-J11	COM-J12	COM-J13	COM-J14	COM-J15	COM-J16
0.1	4.92	4.91	4.92	4.91	4.85	4.94	4.89	4.89
0.5	4.26	4.25	4.29	4.27	4.21	4.31	4.25	4.26
1	4.24	4.23	4.27	4.24	4.19	4.29	4.22	4.24
5	4.24	4.23	4.27	4.25	4.20	4.29	4.23	4.24
10	4.24	4.23	4.27	4.25	4.20	4.30	4.23	4.25
20	4.25	4.24	4.28	4.26	4.21	4.31	4.25	4.26
50	4.28	4.26	4.30	4.28	4.25	4.34	4.28	4.30
100	4.32	4.30	4.34	4.33	4.32	4.41	4.34	4.37
200	4.40	4.38	4.41	4.41	4.48	4.58	4.50	4.54
400	4.60	4.55	4.59	4.61	4.74	4.83	4.75	4.80
600	4.79	4.73	4.76	4.80	4.78	4.86	4.78	4.83
800	4.94	4.88	4.91	4.95	4.90	4.96	4.86	4.96
1000	5.03	4.97	5.01	5.04	5.20	5.26	5.16	5.27
1200	5.10	5.02	5.05	5.11	5.38	5.44	5.36	5.44
1400	5.17	5.04	5.07	5.18	5.43	5.45	5.35	5.49
1600	5.29	5.11	5.14	5.28	5.61	5.60	5.49	5.67
1800	5.42	5.25	5.28	5.41	5.83	5.87	5.78	5.89
2000	5.54	5.43	5.47	5.54	5.97	5.98	5.88	6.03
2200	5.65	5.58	5.63	5.66	6.06	6.07	5.97	6.13
2400	5.76	5.68	5.72	5.77	6.18	6.30	6.20	6.25
2600	5.84	5.76	5.80	5.85	6.36	6.45	6.35	6.43
2800	5.90	5.85	5.89	5.92	6.46	6.55	6.46	6.53
3000	6.01	5.94	5.98	6.02	6.58	6.69	6.59	6.65
3200	6.18	6.01	6.03	6.20	6.75	6.79	6.69	6.81
3400	6.30	6.05	6.08	6.33	6.86	6.88	6.78	6.92
3600	6.31	6.11	6.14	6.34	7.10	6.92	6.84	7.17
3800	6.34	6.17	6.19	6.36	7.20	7.03	6.95	7.27
4000	6.45	6.17	6.15	6.47	7.22	7.11	7.04	7.28
4200	6.59	6.12	6.07	6.61	7.42	7.00	6.96	7.48
4400	6.62	6.14	6.10	6.65	7.45	7.21	7.13	7.53
4600	6.63	6.33	6.34	6.68	7.56	7.43	7.36	7.61
4800	6.81	6.59	6.63	6.84	7.58	7.26	7.22	7.63
5000	6.99	6.72	6.70	7.01	7.75	7.69	7.57	7.81
5200	6.94	6.62	6.56	6.98	8.34	8.18	8.09	8.41
5400	6.85	6.57	6.56	6.91	8.24	8.02	7.95	8.32
5600	7.23	6.86	6.98	7.28	8.48	8.37	8.25	8.53
5800	7.84	7.37	7.46	7.89	9.19	8.86	8.81	9.23
6000	8.07	7.63	7.61	8.14	9.06	8.78	8.74	9.11
6200	7.92	7.55	7.50	8.00	9.13	8.89	8.82	9.15
6400	7.78	7.43	7.41	7.85	9.32	9.07	9.04	9.36
6600	7.74	7.45	7.42	7.81	9.26	9.04	8.99	9.31
6800	7.75	7.52	7.42	7.84	9.23	9.06	8.99	9.29
7000	7.94	7.57	7.47	8.05	9.34	9.15	9.07	9.41
7200	8.20	7.72	7.66	8.31	9.51	9.31	9.24	9.56
7400	8.26	7.91	7.82	8.39	9.80	9.55	9.49	9.84
7600	8.39	8.09	7.96	8.56	10.51	10.02	9.93	10.55
7800	8.91	8.37	8.24	9.07	10.71	10.38	10.31	10.75
8000	9.57	8.84	8.74	9.70	10.96	10.67	10.55	11.00
8200	10.05	9.40	9.29	10.25	11.81	11.28	11.16	11.84
8400	10.26	9.75	9.61	10.54	12.18	11.69	11.65	12.20
8500	10.29	9.82	9.68	10.58	12.14	11.74	11.68	12.17

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +50°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Active Ports								
	(:1)								
	COM	J1	J2	J3	J4	J5	J6	J7	J8
0.1	2.03	2.01	2.00	2.02	2.01	2.04	2.00	2.01	2.02
0.5	1.32	1.32	1.31	1.32	1.32	1.32	1.31	1.31	1.31
1	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28
5	1.27	1.27	1.26	1.27	1.27	1.27	1.26	1.26	1.26
10	1.27	1.27	1.26	1.27	1.27	1.27	1.26	1.26	1.27
20	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.26	1.27
50	1.27	1.27	1.26	1.27	1.27	1.27	1.27	1.27	1.27
100	1.25	1.26	1.26	1.26	1.26	1.28	1.27	1.27	1.27
200	1.20	1.21	1.21	1.21	1.21	1.28	1.27	1.27	1.27
400	1.03	1.03	1.04	1.03	1.03	1.26	1.25	1.25	1.24
600	1.22	1.20	1.18	1.19	1.19	1.17	1.19	1.18	1.17
800	1.31	1.27	1.31	1.31	1.28	1.05	1.08	1.08	1.06
1000	1.18	1.12	1.18	1.19	1.14	1.07	1.05	1.04	1.05
1200	1.12	1.08	1.07	1.07	1.05	1.15	1.17	1.16	1.12
1400	1.20	1.12	1.25	1.26	1.14	1.15	1.26	1.24	1.14
1600	1.15	1.21	1.22	1.23	1.21	1.15	1.29	1.27	1.16
1800	1.03	1.25	1.08	1.07	1.23	1.22	1.23	1.22	1.23
2000	1.04	1.10	1.09	1.10	1.08	1.29	1.12	1.13	1.28
2200	1.06	1.25	1.08	1.10	1.24	1.27	1.06	1.08	1.26
2400	1.03	1.33	1.14	1.12	1.32	1.21	1.07	1.07	1.19
2600	1.21	1.19	1.14	1.12	1.20	1.19	1.06	1.06	1.18
2800	1.27	1.20	1.15	1.12	1.21	1.20	1.10	1.10	1.18
3000	1.12	1.13	1.24	1.21	1.15	1.14	1.18	1.17	1.13
3200	1.41	1.04	1.24	1.22	1.05	1.05	1.22	1.21	1.02
3400	1.56	1.03	1.29	1.28	1.01	1.12	1.19	1.18	1.07
3600	1.30	1.17	1.29	1.32	1.15	1.13	1.16	1.16	1.09
3800	1.53	1.21	1.18	1.22	1.21	1.07	1.27	1.27	1.04
4000	1.61	1.18	1.28	1.32	1.17	1.19	1.41	1.42	1.18
4200	1.40	1.41	1.35	1.44	1.41	1.40	1.49	1.50	1.37
4400	1.45	1.38	1.16	1.22	1.43	1.51	1.41	1.41	1.49
4600	1.34	1.15	1.12	1.20	1.19	1.40	1.20	1.19	1.43
4800	1.37	1.39	1.32	1.40	1.44	1.14	1.06	1.07	1.19
5000	1.14	1.29	1.21	1.19	1.34	1.14	1.28	1.27	1.13
5200	1.25	1.06	1.07	1.14	1.09	1.31	1.39	1.37	1.33
5400	1.30	1.21	1.22	1.27	1.27	1.25	1.28	1.27	1.32
5600	1.19	1.10	1.20	1.12	1.04	1.08	1.09	1.11	1.09
5800	1.58	1.26	1.16	1.20	1.37	1.23	1.21	1.20	1.22
6000	1.48	1.20	1.13	1.18	1.28	1.35	1.30	1.29	1.36
6200	1.35	1.12	1.08	1.07	1.23	1.28	1.25	1.22	1.31
6400	1.49	1.29	1.12	1.22	1.37	1.15	1.12	1.09	1.17
6600	1.45	1.24	1.12	1.18	1.21	1.19	1.15	1.15	1.19
6800	1.38	1.20	1.10	1.13	1.14	1.21	1.20	1.19	1.20
7000	1.23	1.21	1.18	1.15	1.10	1.17	1.17	1.15	1.15
7200	1.26	1.19	1.18	1.11	1.09	1.08	1.10	1.07	1.08
7400	1.57	1.28	1.36	1.24	1.21	1.07	1.05	1.02	1.05
7600	1.59	1.12	1.47	1.27	1.16	1.19	1.20	1.16	1.19
7800	1.34	1.15	1.30	1.11	1.05	1.20	1.40	1.34	1.24
8000	1.50	1.19	1.50	1.27	1.13	1.08	1.51	1.46	1.13
8200	1.58	1.23	1.59	1.39	1.11	1.20	1.44	1.43	1.13
8400	1.27	1.59	1.31	1.18	1.42	1.42	1.26	1.28	1.33
8500	1.11	1.63	1.31	1.14	1.46	1.49	1.19	1.21	1.41

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +50°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Active Ports							
	(:1)							
	J9	J10	J11	J12	J13	J14	J15	J16
0.1	2.03	2.03	2.01	2.01	2.01	2.00	2.01	1.99
0.5	1.32	1.32	1.32	1.32	1.31	1.33	1.32	1.32
1	1.29	1.28	1.29	1.29	1.28	1.29	1.28	1.28
5	1.27	1.27	1.28	1.27	1.26	1.28	1.27	1.27
10	1.27	1.27	1.28	1.27	1.27	1.28	1.27	1.27
20	1.27	1.27	1.28	1.27	1.27	1.28	1.27	1.27
50	1.28	1.27	1.28	1.28	1.27	1.28	1.27	1.27
100	1.28	1.27	1.28	1.28	1.26	1.27	1.26	1.26
200	1.29	1.28	1.28	1.28	1.22	1.22	1.21	1.22
400	1.26	1.25	1.25	1.25	1.05	1.05	1.04	1.04
600	1.17	1.18	1.17	1.17	1.21	1.21	1.19	1.20
800	1.04	1.08	1.06	1.04	1.30	1.34	1.31	1.29
1000	1.08	1.06	1.08	1.08	1.13	1.17	1.18	1.14
1200	1.15	1.18	1.20	1.16	1.10	1.12	1.08	1.09
1400	1.14	1.28	1.26	1.15	1.17	1.31	1.28	1.17
1600	1.15	1.30	1.25	1.14	1.21	1.22	1.25	1.21
1800	1.25	1.24	1.17	1.22	1.24	1.05	1.07	1.23
2000	1.32	1.14	1.12	1.30	1.09	1.12	1.08	1.09
2200	1.30	1.09	1.14	1.30	1.25	1.03	1.08	1.24
2400	1.23	1.08	1.14	1.23	1.32	1.16	1.14	1.33
2600	1.20	1.07	1.14	1.20	1.18	1.20	1.15	1.20
2800	1.19	1.12	1.19	1.19	1.17	1.19	1.14	1.20
3000	1.12	1.20	1.25	1.12	1.11	1.28	1.22	1.14
3200	1.01	1.23	1.27	1.01	1.03	1.28	1.23	1.06
3400	1.09	1.19	1.21	1.10	1.03	1.34	1.28	1.03
3600	1.10	1.14	1.18	1.11	1.17	1.34	1.31	1.17
3800	1.06	1.23	1.28	1.07	1.20	1.21	1.19	1.23
4000	1.19	1.37	1.41	1.19	1.14	1.32	1.30	1.16
4200	1.39	1.47	1.47	1.37	1.38	1.36	1.40	1.39
4400	1.52	1.45	1.37	1.49	1.36	1.12	1.17	1.39
4600	1.44	1.29	1.17	1.45	1.15	1.17	1.19	1.16
4800	1.18	1.07	1.04	1.23	1.39	1.28	1.34	1.39
5000	1.09	1.18	1.21	1.06	1.29	1.16	1.15	1.31
5200	1.27	1.34	1.29	1.24	1.07	1.10	1.14	1.04
5400	1.24	1.33	1.21	1.25	1.23	1.21	1.24	1.23
5600	1.09	1.17	1.14	1.12	1.10	1.20	1.13	1.13
5800	1.22	1.15	1.22	1.22	1.23	1.12	1.16	1.20
6000	1.33	1.21	1.25	1.30	1.18	1.13	1.14	1.17
6200	1.26	1.18	1.17	1.25	1.13	1.08	1.06	1.08
6400	1.13	1.05	1.04	1.11	1.27	1.11	1.17	1.26
6600	1.15	1.09	1.08	1.11	1.18	1.15	1.14	1.21
6800	1.19	1.12	1.13	1.18	1.14	1.13	1.10	1.18
7000	1.20	1.10	1.18	1.25	1.14	1.20	1.15	1.20
7200	1.12	1.11	1.16	1.20	1.11	1.20	1.12	1.17
7400	1.09	1.08	1.10	1.16	1.21	1.36	1.26	1.27
7600	1.22	1.08	1.26	1.30	1.12	1.43	1.28	1.15
7800	1.23	1.31	1.50	1.33	1.10	1.28	1.13	1.14
8000	1.07	1.51	1.58	1.14	1.16	1.56	1.35	1.21
8200	1.18	1.54	1.44	1.15	1.11	1.59	1.39	1.11
8400	1.43	1.40	1.26	1.42	1.41	1.35	1.17	1.44
8500	1.50	1.33	1.25	1.52	1.45	1.42	1.19	1.50

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +50°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Terminated Ports								
	(:1)								
	COM	J1	J2	J3	J4	J5	J6	J7	J8
0.1	1.96	1.46	1.53	1.52	1.49	1.54	1.50	1.50	1.55
0.5	1.23	1.13	1.23	1.20	1.18	1.21	1.20	1.20	1.24
1	1.18	1.11	1.22	1.18	1.17	1.20	1.19	1.19	1.22
5	1.17	1.10	1.22	1.18	1.16	1.19	1.19	1.18	1.22
10	1.17	1.10	1.22	1.18	1.16	1.19	1.19	1.18	1.22
20	1.16	1.10	1.22	1.18	1.16	1.19	1.18	1.18	1.22
50	1.16	1.10	1.22	1.18	1.16	1.19	1.19	1.18	1.22
100	1.16	1.10	1.22	1.18	1.16	1.19	1.18	1.18	1.22
200	1.16	1.10	1.22	1.18	1.16	1.19	1.18	1.18	1.22
400	1.15	1.09	1.20	1.17	1.15	1.18	1.18	1.17	1.21
600	1.14	1.09	1.19	1.16	1.14	1.17	1.17	1.16	1.20
800	1.14	1.08	1.18	1.15	1.14	1.16	1.16	1.16	1.19
1000	1.13	1.08	1.17	1.14	1.13	1.15	1.16	1.15	1.19
1200	1.12	1.08	1.16	1.13	1.12	1.14	1.15	1.15	1.18
1400	1.11	1.08	1.15	1.13	1.12	1.14	1.15	1.14	1.17
1600	1.10	1.08	1.14	1.12	1.11	1.13	1.14	1.14	1.16
1800	1.10	1.08	1.13	1.11	1.11	1.12	1.14	1.13	1.15
2000	1.10	1.08	1.11	1.10	1.10	1.11	1.14	1.13	1.14
2200	1.09	1.08	1.10	1.10	1.10	1.10	1.13	1.12	1.13
2400	1.09	1.08	1.09	1.09	1.09	1.09	1.12	1.12	1.12
2600	1.09	1.08	1.08	1.08	1.08	1.08	1.12	1.11	1.11
2800	1.09	1.08	1.07	1.07	1.08	1.07	1.11	1.11	1.10
3000	1.09	1.08	1.06	1.07	1.07	1.07	1.10	1.10	1.09
3200	1.10	1.08	1.06	1.06	1.06	1.05	1.09	1.09	1.08
3400	1.11	1.07	1.07	1.05	1.05	1.04	1.08	1.09	1.07
3600	1.12	1.07	1.08	1.05	1.05	1.04	1.08	1.08	1.07
3800	1.14	1.07	1.08	1.05	1.05	1.03	1.07	1.08	1.07
4000	1.15	1.06	1.09	1.05	1.05	1.03	1.08	1.08	1.06
4200	1.16	1.06	1.10	1.05	1.06	1.03	1.08	1.08	1.07
4400	1.17	1.06	1.10	1.04	1.06	1.02	1.09	1.07	1.06
4600	1.18	1.06	1.11	1.04	1.06	1.02	1.08	1.07	1.06
4800	1.19	1.06	1.11	1.04	1.07	1.02	1.09	1.06	1.05
5000	1.20	1.06	1.10	1.04	1.07	1.02	1.08	1.06	1.03
5200	1.20	1.06	1.11	1.03	1.06	1.01	1.06	1.04	1.02
5400	1.20	1.06	1.11	1.04	1.05	1.01	1.05	1.04	1.01
5600	1.20	1.06	1.11	1.02	1.05	1.01	1.04	1.02	1.01
5800	1.20	1.08	1.12	1.05	1.04	1.03	1.02	1.04	1.04
6000	1.19	1.08	1.14	1.04	1.02	1.03	1.03	1.03	1.05
6200	1.18	1.09	1.15	1.05	1.03	1.06	1.04	1.06	1.07
6400	1.18	1.12	1.18	1.08	1.05	1.08	1.08	1.09	1.10
6600	1.17	1.14	1.20	1.08	1.08	1.09	1.11	1.10	1.13
6800	1.17	1.17	1.22	1.11	1.11	1.12	1.14	1.14	1.14
7000	1.17	1.20	1.24	1.13	1.13	1.13	1.16	1.16	1.16
7200	1.14	1.24	1.26	1.15	1.17	1.16	1.19	1.19	1.18
7400	1.13	1.27	1.29	1.18	1.21	1.19	1.23	1.22	1.21
7600	1.12	1.31	1.32	1.20	1.25	1.21	1.25	1.26	1.23
7800	1.11	1.35	1.35	1.23	1.29	1.24	1.29	1.29	1.26
8000	1.11	1.39	1.37	1.26	1.33	1.27	1.31	1.33	1.28
8200	1.11	1.43	1.39	1.29	1.37	1.30	1.34	1.36	1.31
8400	1.12	1.47	1.40	1.31	1.39	1.32	1.35	1.39	1.32
8500	1.12	1.49	1.40	1.32	1.40	1.33	1.36	1.40	1.32

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +50°C, Pin=8dBm

FREQUENCY (MHz)	VSWR, Terminated Ports							
	(:1)							
	J9	J10	J11	J12	J13	J14	J15	J16
0.1	1.52	1.53	1.49	1.46	1.52	1.45	1.50	1.48
0.5	1.19	1.21	1.18	1.14	1.22	1.13	1.19	1.19
1	1.17	1.20	1.16	1.12	1.20	1.11	1.18	1.17
5	1.16	1.19	1.16	1.12	1.20	1.11	1.17	1.17
10	1.16	1.19	1.16	1.12	1.20	1.11	1.17	1.17
20	1.16	1.19	1.16	1.12	1.20	1.11	1.17	1.17
50	1.16	1.19	1.16	1.12	1.20	1.10	1.17	1.17
100	1.17	1.19	1.16	1.12	1.20	1.11	1.17	1.17
200	1.16	1.19	1.16	1.12	1.20	1.11	1.17	1.17
400	1.15	1.18	1.15	1.11	1.18	1.10	1.16	1.15
600	1.14	1.17	1.14	1.10	1.18	1.09	1.15	1.15
800	1.13	1.16	1.13	1.10	1.17	1.09	1.15	1.14
1000	1.13	1.16	1.12	1.10	1.16	1.09	1.14	1.14
1200	1.12	1.15	1.11	1.09	1.15	1.09	1.13	1.13
1400	1.11	1.14	1.10	1.09	1.14	1.09	1.12	1.12
1600	1.10	1.13	1.09	1.09	1.13	1.09	1.11	1.12
1800	1.09	1.12	1.08	1.09	1.12	1.09	1.11	1.11
2000	1.08	1.12	1.07	1.08	1.10	1.09	1.10	1.11
2200	1.08	1.11	1.07	1.08	1.10	1.09	1.09	1.10
2400	1.07	1.10	1.06	1.08	1.08	1.09	1.08	1.09
2600	1.07	1.09	1.05	1.08	1.07	1.09	1.07	1.08
2800	1.06	1.09	1.05	1.08	1.06	1.08	1.06	1.07
3000	1.05	1.08	1.05	1.07	1.05	1.08	1.05	1.06
3200	1.05	1.07	1.04	1.07	1.05	1.07	1.05	1.05
3400	1.04	1.07	1.04	1.06	1.04	1.06	1.04	1.04
3600	1.04	1.07	1.04	1.05	1.04	1.05	1.04	1.03
3800	1.04	1.07	1.04	1.05	1.04	1.04	1.04	1.03
4000	1.04	1.07	1.04	1.06	1.04	1.02	1.04	1.02
4200	1.05	1.08	1.05	1.07	1.04	1.02	1.05	1.03
4400	1.04	1.08	1.04	1.08	1.04	1.02	1.04	1.03
4600	1.04	1.08	1.04	1.08	1.04	1.03	1.05	1.03
4800	1.04	1.09	1.03	1.10	1.04	1.05	1.05	1.03
5000	1.04	1.07	1.04	1.09	1.04	1.06	1.05	1.03
5200	1.03	1.06	1.03	1.08	1.03	1.09	1.05	1.05
5400	1.02	1.04	1.04	1.07	1.05	1.10	1.06	1.04
5600	1.01	1.03	1.03	1.06	1.05	1.13	1.06	1.06
5800	1.03	1.02	1.07	1.04	1.07	1.14	1.09	1.07
6000	1.03	1.04	1.07	1.05	1.07	1.17	1.09	1.08
6200	1.06	1.07	1.10	1.06	1.09	1.19	1.10	1.10
6400	1.09	1.11	1.13	1.10	1.10	1.21	1.12	1.11
6600	1.10	1.14	1.15	1.14	1.12	1.24	1.13	1.13
6800	1.13	1.17	1.19	1.17	1.15	1.26	1.15	1.15
7000	1.15	1.20	1.21	1.21	1.17	1.29	1.17	1.18
7200	1.18	1.23	1.24	1.25	1.20	1.32	1.19	1.20
7400	1.21	1.27	1.28	1.30	1.23	1.35	1.21	1.23
7600	1.24	1.30	1.31	1.34	1.25	1.39	1.23	1.26
7800	1.27	1.34	1.35	1.39	1.29	1.43	1.25	1.30
8000	1.31	1.38	1.38	1.42	1.32	1.46	1.27	1.33
8200	1.33	1.41	1.41	1.46	1.35	1.50	1.29	1.36
8400	1.36	1.42	1.42	1.46	1.37	1.53	1.31	1.39
8500	1.37	1.42	1.43	1.47	1.38	1.54	1.31	1.40

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +50°C, Pin=8dBm

FREQUENCY (MHz)	ISOLATION COM to terminated port								
	(dB)								
	COM-J1 @J16 Active	COM-J2 @J1 Active	COM-J4 @J3 Active	COM-J5 @J6 Active	COM-J7 @J6 Active	COM-J8 @J7 Active	COM-J10 @J9 Active	COM-J13 @J12 Active	COM-J15 @J14 Active
0.1	102.34	100.44	96.93	93.25	93.25	94.84	107.28	98.64	94.80
0.5	103.20	97.10	94.72	101.72	101.72	106.14	93.76	101.81	100.85
1	98.27	98.46	91.39	95.36	95.36	93.25	97.93	91.35	97.97
5	95.56	105.26	95.87	99.55	99.55	102.91	98.22	116.91	102.31
10	108.28	109.56	102.85	112.07	112.07	105.68	101.80	105.94	103.06
20	115.34	102.98	100.21	102.66	102.66	107.56	100.96	101.78	99.39
50	111.18	104.81	96.97	102.89	102.89	100.57	97.31	101.54	100.19
100	105.31	104.03	94.32	100.91	100.91	102.69	100.40	100.93	101.33
200	132.22	111.49	97.47	101.55	101.55	102.16	95.75	99.54	98.17
400	112.38	110.41	97.97	104.42	104.42	108.62	97.40	98.61	98.99
600	119.97	113.18	100.31	109.62	109.62	108.75	95.59	96.67	102.17
800	109.29	111.36	102.63	104.61	104.61	108.37	95.36	96.73	102.36
1000	111.87	114.94	102.24	113.68	113.68	109.90	95.81	97.86	100.69
1200	111.37	117.78	103.14	114.07	114.07	112.24	97.25	99.16	100.37
1400	116.57	114.66	110.64	109.97	109.97	113.22	99.31	98.62	98.37
1600	119.52	107.68	106.07	106.83	106.83	105.98	97.32	97.26	97.40
1800	109.89	110.96	105.62	110.44	110.44	106.82	100.39	98.93	102.30
2000	106.80	122.87	103.84	112.13	112.13	99.90	98.67	97.93	100.38
2200	116.49	108.72	100.88	105.87	105.87	100.91	98.93	98.72	102.16
2400	110.59	106.71	99.59	104.54	104.54	101.45	98.75	96.70	100.64
2600	126.85	100.80	95.68	109.15	109.15	97.12	99.87	96.80	101.30
2800	108.89	99.93	94.63	105.93	105.93	95.21	97.42	97.65	101.57
3000	113.00	101.16	94.41	112.88	112.88	93.61	95.92	97.50	105.31
3200	117.58	97.46	93.74	111.75	111.75	92.47	93.64	97.63	103.63
3400	104.93	98.74	91.20	106.97	106.97	91.71	92.82	95.63	106.36
3600	107.28	96.80	90.24	123.61	123.61	89.95	92.03	96.39	102.91
3800	114.25	100.04	89.04	114.37	114.37	89.01	90.90	94.43	106.87
4000	110.02	95.46	89.00	108.94	108.94	87.34	90.59	96.32	107.44
4200	110.66	95.18	88.40	102.85	102.85	86.93	89.80	97.82	103.31
4400	105.90	93.61	86.88	101.91	101.91	85.77	89.86	96.21	109.22
4600	113.45	90.50	86.08	106.69	106.69	85.13	89.43	95.25	104.42
4800	109.06	89.13	85.42	101.66	101.66	84.57	88.54	98.21	103.71
5000	113.72	90.57	85.67	99.86	99.86	83.95	89.21	95.52	99.68
5200	119.89	89.64	85.37	98.39	98.39	83.80	88.68	99.14	99.39
5400	108.83	89.46	84.12	101.08	101.08	82.93	90.26	96.55	97.20
5600	129.88	88.31	83.86	97.47	97.47	83.09	90.64	97.20	96.66
5800	107.30	88.76	83.54	95.70	95.70	82.46	91.38	100.56	97.12
6000	123.69	88.18	82.78	99.80	99.80	82.21	92.87	98.50	95.39
6200	110.38	87.46	81.93	97.36	97.36	81.33	90.48	99.20	92.34
6400	113.06	86.28	81.27	96.15	96.15	80.46	88.87	96.55	93.15
6600	117.95	84.93	79.89	92.00	92.00	79.42	86.06	99.06	91.85
6800	106.34	83.84	79.15	90.00	90.00	78.85	83.11	96.11	90.92
7000	111.13	82.05	77.97	87.76	87.76	77.74	81.14	95.61	89.34
7200	104.15	80.47	77.13	86.16	86.16	76.53	79.46	93.66	88.58
7400	104.90	80.12	75.81	84.50	84.50	75.27	77.77	91.81	87.48
7600	101.05	78.67	74.50	82.27	82.27	73.95	76.55	90.59	85.99
7800	101.32	78.32	73.09	80.91	80.91	72.85	76.05	90.05	85.19
8000	100.08	76.70	71.74	80.23	80.23	71.37	75.55	90.99	84.23
8200	94.00	76.20	70.43	78.57	78.57	70.26	74.69	90.07	83.05
8400	96.16	75.10	69.40	77.97	77.97	68.80	74.06	89.21	81.71
8500	93.83	74.49	68.54	77.49	77.49	68.24	73.17	87.69	81.09

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 www.minicircuits.com/MCLStore/terms.jsp



Solid State USB RF SP16T Switch

USB-1SP16T-83H

Typical Performance Data

TEST CONDITIONS: @Temperature = +50°C, Pin=8dBm

FREQUENCY (MHz)	ISOLATION between adjacent ports								
	(dB)								
	J1-J2 @J1 Active	J3-J4 @J3 Active	J5-J6 @J5 Active	J6-J7 @J6 Active	J8-J9 @J8 Active	J10-J11 @J10 Active	J12-J13 @J12 Active	J14-J15 @J14 Active	J15-J16 @J15 Active
0.1	127.16	98.88	117.95	108.32	97.72	101.79	98.22	103.70	98.35
0.5	118.20	108.83	94.15	97.19	107.76	97.11	95.90	90.79	91.91
1	89.21	97.26	99.21	96.83	102.95	101.00	98.85	106.38	99.90
5	96.32	101.88	103.02	95.51	93.01	98.71	97.02	95.76	92.95
10	104.36	100.44	101.14	99.09	102.90	97.08	101.04	100.48	96.91
20	105.60	96.01	98.02	100.04	98.26	99.07	99.05	95.51	97.02
50	98.89	94.60	96.88	97.96	94.09	95.85	96.18	95.90	96.10
100	102.36	92.64	97.09	96.92	93.99	96.99	95.96	97.36	97.65
200	104.22	92.42	96.90	97.92	92.65	94.72	97.25	95.27	97.45
400	111.59	94.29	97.15	101.22	91.45	94.43	92.40	96.13	97.72
600	108.23	95.34	96.65	100.90	91.20	93.88	91.52	98.29	101.20
800	109.53	94.13	101.84	102.95	92.45	96.02	92.40	95.18	99.22
1000	119.06	95.01	102.83	104.84	92.92	96.62	91.79	95.76	97.93
1200	114.76	94.41	100.40	118.42	93.35	94.98	90.98	95.20	96.34
1400	108.11	93.98	100.88	104.64	92.05	95.45	91.95	96.47	95.19
1600	104.14	94.32	100.90	111.11	93.94	95.19	91.96	95.17	95.74
1800	102.89	97.09	98.82	106.39	93.99	98.14	93.30	94.07	97.35
2000	106.04	98.34	100.18	108.69	93.73	95.24	90.81	95.84	101.82
2200	101.50	102.16	97.22	101.77	94.26	95.19	90.65	94.14	111.42
2400	100.76	107.30	100.83	100.27	92.31	94.35	89.75	92.86	106.44
2600	99.60	100.41	100.90	102.06	93.51	93.20	91.26	92.70	99.01
2800	102.26	97.43	101.14	100.44	92.48	93.27	91.99	93.42	95.50
3000	98.42	93.13	101.45	97.32	94.95	91.98	92.51	92.91	91.49
3200	94.43	93.05	103.58	97.08	92.31	90.98	90.40	94.04	90.49
3400	93.49	93.66	96.35	97.38	90.81	92.97	91.33	97.12	90.20
3600	94.55	92.36	95.54	98.10	92.67	93.86	90.19	100.31	89.04
3800	94.38	94.70	95.05	96.59	92.46	93.91	90.25	116.03	90.91
4000	92.05	96.12	92.48	95.45	91.90	96.94	89.14	100.86	92.11
4200	91.95	95.19	91.17	93.08	91.26	98.83	88.93	93.84	92.31
4400	91.97	102.31	89.65	92.70	90.93	95.17	88.71	90.82	99.24
4600	93.84	98.95	90.08	91.05	93.73	93.24	90.87	88.55	97.15
4800	90.78	95.75	90.04	89.62	93.11	91.50	91.76	87.99	92.60
5000	89.13	107.50	92.45	89.70	92.13	90.94	90.80	85.10	101.33
5200	91.04	95.12	90.34	87.88	91.10	88.11	91.12	85.28	91.86
5400	89.65	92.74	88.22	86.28	92.06	86.15	92.03	84.96	90.37
5600	88.06	100.66	87.18	86.38	92.91	84.74	89.37	84.13	101.61
5800	87.51	99.87	86.96	85.35	93.27	84.01	89.51	83.69	93.57
6000	91.51	99.71	87.63	85.37	92.55	83.64	90.66	84.22	96.54
6200	86.39	91.06	88.49	84.57	93.31	83.55	90.63	84.08	99.99
6400	85.97	89.50	86.38	83.98	92.94	81.87	89.88	84.25	92.92
6600	86.12	89.07	85.54	82.11	91.20	81.36	89.76	84.86	94.32
6800	85.18	85.27	84.20	81.05	91.79	80.63	88.99	85.23	87.64
7000	84.18	83.69	84.36	79.73	93.39	80.07	86.95	84.08	84.78
7200	82.52	81.23	84.02	78.51	89.44	79.31	86.26	83.59	81.81
7400	80.36	80.84	83.22	77.39	90.39	78.35	86.04	81.43	80.63
7600	80.31	83.19	81.38	75.65	88.37	76.66	85.08	79.02	81.65
7800	78.79	78.09	80.00	73.64	89.37	74.70	85.35	78.00	77.84
8000	75.76	75.72	80.21	71.99	90.32	73.08	84.21	74.86	76.01
8200	75.72	78.64	81.02	71.13	91.93	72.21	84.71	72.81	79.45
8400	76.86	78.11	81.23	70.24	87.78	70.72	82.80	71.29	78.47
8500	75.29	74.72	81.65	69.46	86.80	70.23	83.01	70.93	76.44

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 www.minicircuits.com/MCLStore/terms.jsp

