

Xtra Long Life USB/Ethernet RF SPDT

RC-1SPDT-A18

Typical Performance Data

TEST CONDITIONS: @Temperature = 0degC

FREQUENCY (MHz)	INSERTION LOSS ON (dB)		ISOLATION OFF (dB)		VSWR COM (:1)		VSWR COM->2 (:1)		VSWR COM->1 (:1)	
	COM-1	COM-2	COM-1	COM-2	ON	OFF	1	2	1	2
10	0.02	0.02	92.69	86.49	1.01	1.01	1.00	1.00	1.01	1.01
20	0.02	0.01	86.06	87.87	1.01	1.01	1.00	1.00	1.01	1.01
30	0.03	0.02	78.50	89.42	1.01	1.00	1.00	1.01	1.00	1.01
40	0.03	0.02	87.99	86.57	1.01	1.01	1.00	1.01	1.01	1.01
50	0.00	0.00	85.58	86.20	1.01	1.01	1.00	1.01	1.01	1.01
60	0.01	0.01	88.17	88.75	1.01	1.01	1.00	1.01	1.01	1.01
70	0.01	0.01	111.04	86.47	1.01	1.01	1.00	1.01	1.01	1.01
80	0.01	0.00	93.25	86.40	1.01	1.01	1.01	1.01	1.01	1.01
90	0.01	0.00	84.68	86.35	1.01	1.01	1.01	1.01	1.01	1.02
100	0.01	0.00	91.27	91.27	1.01	1.01	1.01	1.01	1.01	1.02
200	0.01	0.00	91.56	97.21	1.01	1.01	1.02	1.01	1.01	1.03
300	0.00	0.00	94.03	104.54	1.01	1.01	1.02	1.02	1.01	1.03
400	0.01	0.01	95.48	99.11	1.02	1.02	1.02	1.02	1.02	1.03
500	0.01	0.01	103.50	102.97	1.01	1.01	1.02	1.01	1.01	1.02
600	0.01	0.02	96.73	98.55	1.01	1.01	1.01	1.01	1.01	1.02
700	0.02	0.02	99.74	102.52	1.01	1.01	1.02	1.02	1.01	1.02
800	0.02	0.02	105.65	100.78	1.01	1.01	1.02	1.01	1.01	1.02
900	0.02	0.02	99.56	102.99	1.01	1.02	1.02	1.02	1.02	1.03
1000	0.02	0.03	105.33	97.50	1.01	1.01	1.02	1.02	1.02	1.03
1200	0.02	0.03	95.06	104.12	1.01	1.01	1.03	1.01	1.01	1.03
1400	0.02	0.03	104.83	110.41	1.02	1.01	1.03	1.01	1.01	1.03
1600	0.03	0.03	94.89	99.77	1.02	1.02	1.03	1.02	1.02	1.03
1800	0.03	0.03	103.10	103.23	1.02	1.03	1.04	1.02	1.02	1.03
2000	0.03	0.04	103.84	103.70	1.02	1.03	1.04	1.02	1.02	1.04
2200	0.03	0.04	93.08	102.31	1.02	1.02	1.05	1.02	1.02	1.04
2400	0.04	0.05	102.45	104.45	1.03	1.04	1.05	1.03	1.03	1.05
2600	0.04	0.05	111.34	96.36	1.03	1.05	1.06	1.04	1.04	1.06
2800	0.04	0.05	105.47	103.64	1.03	1.04	1.07	1.04	1.04	1.06
3000	0.05	0.05	101.65	98.86	1.03	1.04	1.08	1.04	1.04	1.07
3200	0.05	0.06	97.59	105.83	1.04	1.06	1.08	1.06	1.06	1.08
3400	0.06	0.07	99.40	102.61	1.06	1.09	1.10	1.08	1.09	1.10
3600	0.06	0.06	105.16	112.37	1.07	1.08	1.10	1.08	1.08	1.11
4000	0.07	0.07	100.12	102.42	1.10	1.13	1.12	1.12	1.12	1.13
4500	0.08	0.09	110.61	104.60	1.14	1.14	1.13	1.15	1.15	1.14
5000	0.10	0.12	101.66	99.14	1.19	1.22	1.14	1.23	1.21	1.17
5500	0.12	0.13	104.68	106.94	1.24	1.21	1.13	1.23	1.21	1.15
6000	0.12	0.14	102.68	99.55	1.26	1.23	1.13	1.27	1.23	1.17
6500	0.12	0.14	101.00	95.07	1.26	1.19	1.10	1.24	1.19	1.15
7000	0.12	0.13	97.32	97.36	1.23	1.14	1.08	1.20	1.16	1.13
7500	0.12	0.13	92.52	93.66	1.19	1.13	1.06	1.16	1.12	1.11
8000	0.12	0.13	100.57	96.16	1.17	1.08	1.06	1.13	1.09	1.11
8500	0.15	0.14	95.34	93.74	1.12	1.08	1.07	1.11	1.08	1.11
9000	0.15	0.14	94.67	91.78	1.08	1.06	1.05	1.05	1.04	1.10
9500	0.16	0.15	92.17	93.77	1.06	1.02	1.07	1.10	1.04	1.11
10000	0.17	0.17	92.10	91.45	1.07	1.05	1.08	1.06	1.02	1.11
12000	0.21	0.18	91.26	86.33	1.03	1.06	1.12	1.04	1.07	1.05
13000	0.26	0.20	87.46	84.59	1.06	1.08	1.21	1.06	1.10	1.14
14000	0.29	0.22	87.80	81.01	1.12	1.11	1.27	1.14	1.15	1.25
15000	0.36	0.28	83.73	78.00	1.27	1.25	1.31	1.25	1.25	1.32
16000	0.46	0.34	82.49	75.43	1.19	1.31	1.27	1.23	1.27	1.26
17000	0.38	0.28	81.40	72.40	1.09	1.11	1.22	1.04	1.10	1.12
18000	0.43	0.33	80.97	69.69	1.27	1.08	1.26	1.20	1.05	1.18

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



Xtra Long Life USB/Ethernet RF SPDT

RC-1SPDT-A18

Typical Performance Data

TEST CONDITIONS: @Temperature = +25degC

FREQUENCY (MHz)	INSERTION LOSS ON (dB)		ISOLATION OFF (dB)		VSWR COM (:1)		VSWR COM->2 (:1)		VSWR COM->1 (:1)	
	COM-1	COM-2	COM-1	COM-2	ON	OFF	1	2	1	2
10	0.00	0.00	86.43	93.17	1.00	1.00	1.00	1.02	1.02	1.01
20	0.02	0.02	87.42	90.43	1.00	1.00	1.00	1.01	1.01	1.01
30	0.02	0.02	89.26	93.81	1.00	1.00	1.00	1.00	1.00	1.01
40	0.03	0.03	91.18	87.61	1.00	1.01	1.00	1.00	1.00	1.01
50	0.00	0.00	91.95	88.50	1.00	1.00	1.00	1.00	1.00	1.01
60	0.00	0.00	92.97	88.43	1.00	1.00	1.00	1.00	1.00	1.01
70	0.01	0.01	88.69	88.95	1.00	1.00	1.00	1.00	1.00	1.01
80	0.01	0.01	106.34	86.65	1.00	1.00	1.00	1.00	1.00	1.01
90	0.01	0.00	89.91	98.42	1.00	1.00	1.00	1.00	1.00	1.01
100	0.00	0.01	92.71	86.88	1.00	1.00	1.00	1.00	1.00	1.01
200	0.01	0.01	94.79	97.05	1.00	1.00	1.01	1.01	1.01	1.01
300	0.02	0.02	109.88	90.43	1.00	1.00	1.01	1.01	1.01	1.01
400	0.02	0.02	102.23	99.10	1.01	1.01	1.01	1.01	1.01	1.01
500	0.02	0.02	97.52	101.30	1.01	1.00	1.01	1.01	1.01	1.01
600	0.03	0.03	100.41	100.25	1.01	1.00	1.01	1.01	1.01	1.01
700	0.03	0.03	98.46	100.26	1.01	1.01	1.01	1.01	1.01	1.01
800	0.03	0.03	107.02	108.08	1.01	1.01	1.01	1.01	1.01	1.01
900	0.03	0.03	98.13	102.59	1.01	1.01	1.02	1.01	1.01	1.01
1000	0.03	0.04	106.26	108.06	1.01	1.01	1.02	1.01	1.01	1.02
1200	0.04	0.04	105.64	118.05	1.01	1.01	1.02	1.00	1.01	1.02
1400	0.04	0.04	113.89	108.14	1.01	1.01	1.03	1.00	1.01	1.02
1600	0.05	0.05	109.89	113.36	1.01	1.01	1.03	1.01	1.01	1.02
1800	0.04	0.05	101.11	105.12	1.02	1.02	1.04	1.01	1.01	1.03
2000	0.05	0.06	98.50	108.08	1.03	1.02	1.04	1.01	1.01	1.03
2200	0.05	0.06	109.01	102.61	1.04	1.02	1.05	1.02	1.02	1.04
2400	0.06	0.06	97.17	103.88	1.05	1.03	1.05	1.02	1.02	1.04
2600	0.06	0.07	102.67	99.87	1.06	1.03	1.06	1.03	1.03	1.05
2800	0.06	0.07	102.17	101.90	1.07	1.04	1.07	1.03	1.04	1.06
3000	0.06	0.07	102.72	102.95	1.08	1.04	1.08	1.04	1.04	1.06
3200	0.06	0.07	108.07	100.45	1.08	1.06	1.09	1.05	1.06	1.07
3400	0.07	0.08	101.22	103.70	1.09	1.07	1.09	1.06	1.07	1.08
3600	0.08	0.08	106.01	102.58	1.09	1.09	1.10	1.08	1.08	1.09
4000	0.09	0.09	105.56	107.81	1.10	1.11	1.11	1.11	1.11	1.10
4500	0.10	0.11	96.22	96.80	1.11	1.15	1.13	1.15	1.15	1.12
5000	0.12	0.13	98.62	100.46	1.15	1.18	1.13	1.18	1.18	1.14
5500	0.13	0.14	105.56	102.08	1.21	1.20	1.13	1.22	1.20	1.15
6000	0.14	0.16	96.57	94.10	1.26	1.20	1.12	1.23	1.21	1.15
6500	0.14	0.16	96.21	107.68	1.27	1.19	1.11	1.23	1.19	1.15
7000	0.13	0.16	99.56	100.96	1.24	1.16	1.10	1.21	1.17	1.14
7500	0.15	0.17	94.50	101.70	1.18	1.14	1.08	1.20	1.15	1.13
8000	0.14	0.16	93.06	95.68	1.12	1.13	1.07	1.17	1.13	1.12
8500	0.15	0.16	92.44	95.29	1.06	1.09	1.07	1.13	1.09	1.12
9000	0.14	0.16	92.53	92.00	1.06	1.06	1.06	1.09	1.06	1.10
9500	0.14	0.16	90.69	98.64	1.09	1.04	1.06	1.07	1.03	1.10
10000	0.14	0.16	90.46	93.90	1.10	1.02	1.07	1.06	1.03	1.10
12000	0.16	0.17	86.14	90.83	1.12	1.10	1.14	1.04	1.10	1.08
13000	0.17	0.19	82.24	89.32	1.10	1.13	1.19	1.07	1.15	1.14
14000	0.18	0.20	77.92	83.48	1.22	1.15	1.25	1.10	1.18	1.24
15000	0.21	0.22	74.68	81.86	1.33	1.19	1.27	1.14	1.19	1.30
16000	0.22	0.24	71.05	79.37	1.20	1.19	1.25	1.13	1.19	1.28
17000	0.19	0.21	67.00	78.15	1.18	1.11	1.23	1.09	1.14	1.17
18000	0.17	0.21	64.13	77.52	1.20	1.13	1.27	1.06	1.14	1.17

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



Xtra Long Life USB/Ethernet RF SPDT

RC-1SPDT-A18

Typical Performance Data

TEST CONDITIONS: @Temperature = +45degC

FREQUENCY (MHz)	INSERTION LOSS ON (dB)		ISOLATION OFF (dB)		VSWR COM (:1)		VSWR COM->2 (:1)		VSWR COM->1 (:1)	
	COM-1	COM-2	COM-1	COM-2	ON	OFF	1	2	1	2
10	0.01	0.01	93.16	86.04	1.00	1.01	1.00	1.03	1.03	1.01
20	0.02	0.01	86.95	87.71	1.00	1.01	1.00	1.01	1.01	1.01
30	0.01	0.01	87.55	86.33	1.00	1.00	1.00	1.01	1.01	1.01
40	0.01	0.02	86.27	85.48	1.01	1.01	1.00	1.01	1.01	1.01
50	0.04	0.04	99.67	97.07	1.00	1.01	1.00	1.01	1.01	1.01
60	0.04	0.04	90.09	91.49	1.00	1.00	1.00	1.00	1.00	1.01
70	0.03	0.03	96.24	90.53	1.01	1.00	1.00	1.00	1.00	1.01
80	0.03	0.03	89.09	87.33	1.01	1.00	1.00	1.00	1.00	1.01
90	0.04	0.03	87.46	90.96	1.01	1.01	1.00	1.01	1.00	1.01
100	0.04	0.03	108.00	93.23	1.01	1.01	1.00	1.01	1.01	1.01
200	0.04	0.03	91.04	110.98	1.00	1.00	1.00	1.01	1.00	1.01
300	0.02	0.02	112.96	96.74	1.01	1.00	1.00	1.00	1.01	1.01
400	0.02	0.01	93.21	101.96	1.01	1.01	1.00	1.01	1.01	1.01
500	0.02	0.01	101.11	107.60	1.01	1.01	1.01	1.01	1.01	1.01
600	0.01	0.00	98.77	102.27	1.01	1.01	1.01	1.01	1.01	1.01
700	0.00	0.00	100.18	99.09	1.01	1.01	1.01	1.01	1.01	1.01
800	0.00	0.00	106.15	102.47	1.01	1.01	1.01	1.00	1.01	1.01
900	0.00	0.00	99.25	102.98	1.01	1.01	1.01	1.00	1.01	1.01
1000	0.00	0.01	99.90	105.39	1.01	1.01	1.02	1.01	1.01	1.02
1200	0.01	0.01	100.12	107.89	1.01	1.00	1.02	1.01	1.01	1.02
1400	0.01	0.02	100.50	102.06	1.01	1.01	1.02	1.00	1.01	1.02
1600	0.01	0.02	99.87	117.53	1.01	1.01	1.03	1.01	1.00	1.03
1800	0.01	0.02	102.17	97.27	1.01	1.01	1.04	1.01	1.01	1.04
2000	0.02	0.02	96.89	109.32	1.02	1.02	1.05	1.01	1.02	1.04
2200	0.02	0.03	102.64	101.47	1.02	1.02	1.05	1.01	1.01	1.04
2400	0.03	0.04	101.33	93.50	1.03	1.03	1.05	1.03	1.03	1.04
2600	0.03	0.04	106.77	100.51	1.03	1.04	1.07	1.04	1.04	1.06
2800	0.03	0.04	112.14	102.63	1.03	1.05	1.08	1.05	1.05	1.07
3000	0.03	0.04	113.00	99.01	1.04	1.06	1.08	1.05	1.05	1.07
3200	0.04	0.04	107.61	105.71	1.05	1.07	1.08	1.06	1.07	1.07
3400	0.05	0.06	107.98	114.40	1.07	1.09	1.09	1.08	1.09	1.08
3600	0.05	0.06	114.87	100.87	1.08	1.11	1.10	1.10	1.11	1.10
4000	0.06	0.07	98.83	101.56	1.11	1.13	1.11	1.11	1.13	1.10
4500	0.08	0.09	104.39	112.46	1.15	1.18	1.13	1.17	1.18	1.13
5000	0.09	0.10	97.43	101.23	1.19	1.19	1.12	1.18	1.18	1.13
5500	0.10	0.12	105.16	97.84	1.22	1.20	1.13	1.21	1.20	1.16
6000	0.10	0.12	99.05	98.10	1.24	1.19	1.12	1.21	1.19	1.15
6500	0.10	0.13	101.27	95.61	1.23	1.17	1.11	1.21	1.17	1.16
7000	0.10	0.14	95.68	94.61	1.22	1.15	1.11	1.20	1.15	1.16
7500	0.12	0.15	95.39	101.97	1.19	1.14	1.07	1.19	1.13	1.13
8000	0.12	0.15	93.75	92.47	1.16	1.14	1.08	1.20	1.14	1.15
8500	0.12	0.15	93.50	94.53	1.13	1.09	1.06	1.13	1.09	1.11
9000	0.12	0.15	95.48	90.98	1.08	1.08	1.05	1.11	1.08	1.11
9500	0.12	0.14	93.48	91.28	1.04	1.06	1.06	1.06	1.03	1.11
10000	0.13	0.15	93.06	92.02	1.03	1.06	1.05	1.03	1.05	1.09
12000	0.15	0.17	87.31	85.88	1.08	1.13	1.14	1.06	1.13	1.06
13000	0.18	0.21	86.93	83.67	1.12	1.18	1.21	1.10	1.19	1.11
14000	0.18	0.22	85.23	79.47	1.12	1.16	1.26	1.12	1.15	1.19
15000	0.17	0.22	81.58	75.73	1.11	1.07	1.24	1.07	1.06	1.24
16000	0.17	0.25	80.35	72.22	1.06	1.06	1.22	1.11	1.10	1.22
17000	0.16	0.24	78.82	68.49	1.04	1.09	1.30	1.14	1.15	1.19
18000	0.23	0.24	76.92	66.23	1.06	1.35	1.38	1.17	1.37	1.22

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

