

Xtra Long Life USB/Ethernet RF SPDT

RC-3SPDT-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	0.01	0.00	95.10	86.47	1.01	1.01	1.01	1.01	1.01	1.01
20	0.02	0.01	93.18	87.42	1.00	1.00	1.00	1.01	1.01	1.01
30	0.03	0.01	95.85	86.46	1.00	1.01	1.00	1.00	1.00	1.01
40	0.03	0.02	89.59	86.17	1.01	1.01	1.00	1.01	1.01	1.01
50	0.00	0.01	88.52	86.87	1.01	1.01	1.00	1.01	1.01	1.01
60	0.01	0.02	86.67	93.60	1.01	1.01	1.00	1.01	1.01	1.01
70	0.00	0.02	86.13	105.32	1.01	1.01	1.00	1.01	1.01	1.01
80	0.00	0.02	91.81	91.77	1.01	1.01	1.00	1.01	1.01	1.01
90	0.01	0.02	91.66	86.50	1.01	1.01	1.01	1.01	1.01	1.00
100	0.00	0.01	85.19	93.82	1.01	1.01	1.01	1.01	1.01	1.00
200	0.00	0.02	92.10	102.85	1.01	1.01	1.01	1.01	1.00	1.01
300	0.00	0.03	100.28	102.69	1.01	1.01	1.02	1.01	1.01	1.02
400	0.01	0.03	95.76	94.49	1.01	1.01	1.02	1.02	1.02	1.02
500	0.01	0.03	109.12	116.46	1.02	1.02	1.02	1.02	1.01	1.02
600	0.01	0.03	100.90	108.20	1.01	1.01	1.01	1.01	1.01	1.02
700	0.02	0.03	116.31	121.52	1.01	1.01	1.02	1.01	1.01	1.02
800	0.02	0.04	110.03	97.18	1.01	1.01	1.02	1.02	1.01	1.02
900	0.02	0.03	108.98	103.99	1.01	1.01	1.03	1.02	1.02	1.03
1000	0.02	0.04	106.35	121.29	1.01	1.01	1.03	1.02	1.02	1.03
1200	0.02	0.04	103.47	102.22	1.02	1.01	1.03	1.01	1.01	1.03
1400	0.02	0.04	101.98	104.06	1.02	1.01	1.04	1.02	1.01	1.04
1600	0.03	0.05	96.41	101.06	1.02	1.01	1.04	1.02	1.01	1.04
1800	0.02	0.05	100.83	112.65	1.02	1.02	1.04	1.03	1.02	1.04
2000	0.03	0.05	101.45	99.34	1.03	1.01	1.05	1.03	1.02	1.04
2200	0.03	0.06	113.29	102.68	1.03	1.02	1.05	1.02	1.02	1.05
2400	0.04	0.06	104.81	92.73	1.03	1.02	1.06	1.03	1.03	1.05
2600	0.04	0.06	99.62	100.57	1.03	1.03	1.07	1.05	1.04	1.06
2800	0.04	0.06	110.09	106.20	1.04	1.03	1.08	1.04	1.04	1.07
3000	0.04	0.06	103.39	104.23	1.05	1.04	1.09	1.04	1.04	1.07
3200	0.05	0.07	102.59	111.71	1.05	1.05	1.09	1.06	1.06	1.08
3400	0.06	0.07	101.92	107.63	1.06	1.07	1.11	1.08	1.08	1.09
3600	0.06	0.07	111.01	99.24	1.08	1.08	1.11	1.07	1.08	1.10
4000	0.06	0.08	101.05	98.32	1.11	1.11	1.13	1.11	1.12	1.11
4500	0.07	0.09	94.42	113.13	1.15	1.15	1.14	1.12	1.14	1.12
5000	0.09	0.11	97.06	96.49	1.16	1.20	1.15	1.19	1.21	1.14
5500	0.11	0.13	98.76	93.61	1.22	1.23	1.14	1.19	1.21	1.12
6000	0.12	0.13	95.96	98.43	1.18	1.22	1.13	1.22	1.24	1.13
6500	0.11	0.13	99.65	103.35	1.18	1.22	1.11	1.21	1.22	1.11
7000	0.11	0.12	95.79	96.78	1.17	1.19	1.09	1.17	1.18	1.09
7500	0.11	0.12	97.32	95.44	1.11	1.15	1.08	1.15	1.15	1.08
8000	0.10	0.12	95.12	97.93	1.13	1.12	1.07	1.13	1.12	1.08
8500	0.12	0.13	97.74	94.74	1.09	1.11	1.09	1.12	1.11	1.09
9000	0.13	0.14	93.42	98.17	1.07	1.07	1.08	1.05	1.06	1.09
9500	0.13	0.14	93.39	92.86	1.07	1.06	1.09	1.07	1.06	1.10
10000	0.14	0.15	91.41	91.96	1.04	1.07	1.10	1.06	1.07	1.12
12000	0.21	0.20	88.35	87.13	1.14	1.13	1.14	1.08	1.15	1.11
13000	0.23	0.25	88.31	86.97	1.17	1.16	1.23	1.09	1.15	1.18
14000	0.25	0.28	86.34	84.87	1.11	1.14	1.30	1.11	1.17	1.26
15000	0.31	0.34	84.64	82.50	1.14	1.25	1.33	1.22	1.25	1.31
16000	0.38	0.35	82.89	80.79	1.09	1.20	1.26	1.20	1.21	1.27
17000	0.34	0.31	81.15	79.04	1.08	1.03	1.18	1.07	1.05	1.15
18000	0.37	0.36	77.96	76.83	1.05	1.17	1.29	1.19	1.17	1.17

Notes

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 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/MCStore/terms.jsp



Xtra Long Life USB/Ethernet RF SPDT

RC-3SPDT-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	90.36	94.64	1.00	1.00	1.01	1.00	1.00	1.01
20	0.01	0.00	98.54	99.26	1.00	1.00	1.01	1.00	1.00	1.02
30	0.02	0.01	92.63	93.61	1.00	1.00	1.01	1.00	1.00	1.02
40	0.02	0.01	91.53	89.28	1.01	1.00	1.01	1.01	1.01	1.02
50	0.00	0.01	92.68	90.91	1.00	1.00	1.01	1.00	1.00	1.02
60	0.00	0.01	93.39	85.29	1.00	1.00	1.01	1.00	1.00	1.02
70	0.00	0.00	92.76	93.80	1.00	1.00	1.01	1.00	1.00	1.02
80	0.00	0.00	88.29	88.92	1.00	1.00	1.01	1.00	1.00	1.02
90	0.00	0.00	93.15	87.04	1.00	1.00	1.01	1.00	1.00	1.02
100	0.00	0.00	86.76	87.01	1.00	1.00	1.01	1.00	1.00	1.02
200	0.00	0.00	91.33	91.49	1.00	1.00	1.01	1.00	1.00	1.02
300	0.01	0.01	99.07	99.76	1.00	1.00	1.01	1.01	1.00	1.02
400	0.01	0.01	97.42	100.56	1.00	1.01	1.01	1.00	1.00	1.02
500	0.02	0.01	94.63	99.35	1.00	1.01	1.02	1.01	1.01	1.02
600	0.02	0.02	107.87	104.16	1.01	1.00	1.02	1.01	1.01	1.02
700	0.02	0.02	106.79	101.52	1.01	1.01	1.02	1.01	1.01	1.02
800	0.03	0.02	98.96	107.07	1.01	1.01	1.02	1.01	1.01	1.02
900	0.03	0.02	98.57	102.17	1.00	1.01	1.02	1.01	1.01	1.03
1000	0.03	0.03	103.84	105.08	1.00	1.01	1.02	1.01	1.01	1.03
1200	0.03	0.03	104.39	103.71	1.00	1.01	1.03	1.01	1.01	1.03
1400	0.04	0.04	108.43	103.24	1.00	1.01	1.03	1.01	1.01	1.03
1600	0.04	0.04	104.33	104.07	1.00	1.01	1.03	1.01	1.01	1.04
1800	0.04	0.04	101.50	106.50	1.01	1.01	1.04	1.02	1.02	1.04
2000	0.05	0.05	106.33	98.89	1.01	1.02	1.05	1.02	1.02	1.05
2200	0.05	0.05	104.38	105.50	1.02	1.02	1.05	1.02	1.02	1.05
2400	0.05	0.05	100.20	105.22	1.02	1.02	1.06	1.02	1.02	1.05
2600	0.05	0.06	101.22	96.49	1.03	1.03	1.06	1.03	1.03	1.06
2800	0.06	0.06	100.66	100.52	1.04	1.04	1.07	1.04	1.04	1.07
3000	0.06	0.06	113.93	100.28	1.04	1.04	1.08	1.04	1.03	1.08
3200	0.06	0.06	103.51	114.85	1.05	1.05	1.08	1.05	1.05	1.08
3400	0.07	0.07	103.07	98.24	1.07	1.07	1.09	1.07	1.06	1.09
3600	0.07	0.07	106.49	99.98	1.09	1.08	1.10	1.08	1.07	1.10
4000	0.08	0.08	105.17	106.44	1.11	1.10	1.11	1.12	1.10	1.11
4500	0.10	0.10	108.28	99.81	1.16	1.14	1.13	1.16	1.15	1.14
5000	0.11	0.12	106.56	100.37	1.19	1.17	1.13	1.19	1.17	1.14
5500	0.12	0.13	103.62	101.94	1.22	1.19	1.13	1.21	1.20	1.15
6000	0.13	0.13	94.74	97.50	1.22	1.20	1.12	1.21	1.21	1.14
6500	0.13	0.13	108.06	98.99	1.20	1.20	1.11	1.19	1.20	1.13
7000	0.13	0.13	94.28	101.12	1.18	1.19	1.09	1.17	1.18	1.12
7500	0.13	0.13	93.30	93.47	1.15	1.17	1.08	1.13	1.17	1.09
8000	0.13	0.13	91.10	95.74	1.13	1.15	1.08	1.12	1.16	1.09
8500	0.14	0.13	95.53	97.82	1.09	1.12	1.07	1.09	1.13	1.06
9000	0.13	0.13	90.68	93.46	1.08	1.09	1.08	1.08	1.10	1.06
9500	0.13	0.13	93.52	92.28	1.05	1.06	1.09	1.05	1.06	1.05
10000	0.13	0.13	92.92	90.47	1.06	1.05	1.10	1.06	1.06	1.06
12000	0.16	0.17	88.79	88.10	1.14	1.10	1.10	1.13	1.10	1.13
13000	0.19	0.20	88.25	88.91	1.14	1.13	1.16	1.16	1.13	1.18
14000	0.20	0.20	85.64	84.94	1.12	1.13	1.22	1.13	1.13	1.21
15000	0.22	0.21	82.28	81.89	1.13	1.13	1.25	1.11	1.13	1.21
16000	0.22	0.23	80.93	80.37	1.14	1.11	1.24	1.13	1.11	1.22
17000	0.21	0.23	80.58	80.28	1.12	1.06	1.23	1.15	1.11	1.25
18000	0.21	0.26	78.87	78.31	1.14	1.07	1.29	1.21	1.07	1.29

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Xtra Long Life USB/Ethernet RF SPDT

RC-3SPDT-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	0.03	0.01	92.00	96.48	1.01	1.00	1.00	1.01	1.01	1.01
20	0.01	0.01	93.10	85.54	1.00	1.00	1.00	1.00	1.00	1.01
30	0.02	0.02	87.10	86.10	1.00	1.00	1.00	1.00	1.00	1.01
40	0.02	0.02	87.44	87.32	1.00	1.00	1.00	1.00	1.00	1.01
50	0.01	0.01	85.52	89.13	1.00	1.00	1.00	1.00	1.00	1.01
60	0.00	0.01	90.49	86.10	1.00	1.00	1.00	1.00	1.00	1.01
70	0.01	0.01	90.31	94.05	1.00	1.01	1.00	1.01	1.01	1.01
80	0.01	0.01	93.43	86.17	1.01	1.01	1.00	1.01	1.01	1.01
90	0.01	0.01	94.17	86.73	1.01	1.01	1.01	1.01	1.01	1.01
100	0.01	0.01	91.90	89.83	1.01	1.01	1.01	1.01	1.01	1.01
200	0.01	0.01	98.26	103.68	1.00	1.00	1.01	1.01	1.00	1.01
300	0.01	0.02	116.76	95.71	1.01	1.01	1.00	1.00	1.01	1.01
400	0.02	0.03	99.93	105.84	1.01	1.01	1.00	1.01	1.01	1.01
500	0.02	0.03	106.09	102.44	1.01	1.01	1.01	1.01	1.01	1.01
600	0.03	0.03	112.09	103.42	1.01	1.01	1.01	1.01	1.01	1.01
700	0.03	0.03	109.00	104.63	1.01	1.01	1.01	1.01	1.01	1.01
800	0.03	0.04	108.70	102.11	1.01	1.01	1.01	1.01	1.01	1.01
900	0.03	0.04	100.99	97.92	1.01	1.01	1.01	1.01	1.01	1.02
1000	0.04	0.04	100.51	103.60	1.01	1.01	1.02	1.01	1.01	1.02
1200	0.04	0.04	106.98	101.11	1.01	1.01	1.02	1.00	1.01	1.02
1400	0.05	0.05	102.33	112.25	1.01	1.01	1.03	1.00	1.01	1.03
1600	0.05	0.05	105.28	100.38	1.01	1.00	1.04	1.01	1.01	1.03
1800	0.05	0.05	98.73	107.35	1.01	1.01	1.04	1.01	1.01	1.04
2000	0.06	0.06	115.46	117.46	1.02	1.01	1.05	1.02	1.01	1.04
2200	0.06	0.06	103.28	108.02	1.03	1.01	1.06	1.01	1.01	1.05
2400	0.07	0.07	101.81	102.85	1.03	1.03	1.06	1.03	1.03	1.06
2600	0.07	0.07	103.07	96.44	1.03	1.04	1.07	1.04	1.04	1.06
2800	0.07	0.07	105.69	102.56	1.04	1.03	1.08	1.04	1.04	1.07
3000	0.07	0.08	98.32	99.97	1.05	1.04	1.09	1.04	1.05	1.08
3200	0.08	0.08	93.90	99.83	1.06	1.07	1.09	1.06	1.07	1.08
3400	0.09	0.09	109.17	105.95	1.07	1.09	1.11	1.08	1.09	1.09
3600	0.09	0.09	95.19	113.30	1.09	1.08	1.11	1.07	1.09	1.09
4000	0.10	0.10	99.68	98.18	1.12	1.13	1.12	1.11	1.14	1.11
4500	0.11	0.11	101.53	99.11	1.15	1.14	1.12	1.12	1.15	1.11
5000	0.14	0.13	99.42	101.94	1.16	1.20	1.14	1.17	1.20	1.13
5500	0.14	0.14	100.62	95.58	1.20	1.19	1.13	1.16	1.20	1.12
6000	0.15	0.15	94.60	100.65	1.18	1.20	1.13	1.18	1.20	1.13
6500	0.15	0.15	98.83	97.47	1.15	1.18	1.11	1.17	1.18	1.12
7000	0.15	0.15	96.84	95.86	1.16	1.14	1.10	1.15	1.15	1.11
7500	0.16	0.16	99.59	95.52	1.10	1.15	1.08	1.14	1.14	1.10
8000	0.15	0.16	100.42	100.22	1.12	1.09	1.07	1.11	1.10	1.08
8500	0.17	0.17	95.86	97.28	1.08	1.10	1.08	1.11	1.09	1.09
9000	0.17	0.18	99.29	91.93	1.06	1.10	1.07	1.07	1.07	1.08
9500	0.17	0.18	92.32	94.80	1.08	1.04	1.06	1.03	1.04	1.08
10000	0.18	0.19	100.99	93.19	1.03	1.10	1.07	1.06	1.08	1.09
12000	0.23	0.25	88.28	90.17	1.19	1.18	1.18	1.15	1.19	1.15
13000	0.26	0.28	89.01	88.66	1.23	1.23	1.26	1.18	1.23	1.21
14000	0.26	0.28	86.21	87.49	1.12	1.18	1.29	1.15	1.16	1.25
15000	0.26	0.28	84.10	86.03	1.01	1.11	1.25	1.10	1.09	1.23
16000	0.28	0.32	81.63	84.68	1.04	1.08	1.21	1.08	1.08	1.18
17000	0.27	0.32	80.37	84.83	1.05	1.07	1.30	1.11	1.11	1.20
18000	0.30	0.35	79.19	82.41	1.24	1.14	1.37	1.15	1.18	1.22

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