

Xtra Long Life USB RF SPDT Switch A

USB-3SPDT-A18

Typical Performance Data

TEST CONDITIONS: @Temperature = +25degC

FREQUENCY (MHz)	INSERTION LOSS ON (dB)		ISOLATION OFF (dB)		VSWR IN (:1)		VSWR ENERGIZED (:1)		VSWR DE-ENERGIZED (:1)	
	COM-1	COM-2	COM-1	COM-2	ON	OFF	1	2	1	2
10	0.02	0.01	86.16	86.84	1.01	1.04	1.01	1.01	1.00	1.00
20	0.02	0.01	86.21	88.14	1.00	1.01	1.02	1.01	1.00	1.01
30	0.02	0.01	88.70	89.45	1.00	1.01	1.02	1.00	1.00	1.00
40	0.02	0.02	87.56	87.22	1.01	1.01	1.02	1.00	1.00	1.00
50	0.01	0.01	85.49	86.38	1.00	1.01	1.02	1.00	1.00	1.00
60	0.01	0.01	86.49	97.45	1.00	1.01	1.02	1.00	1.00	1.00
70	0.01	0.00	95.12	89.95	1.00	1.00	1.02	1.00	1.00	1.00
80	0.00	0.01	90.47	88.42	1.00	1.00	1.02	1.00	1.00	1.00
90	0.00	0.01	94.70	87.12	1.00	1.00	1.02	1.00	1.00	1.00
100	0.00	0.00	92.22	93.14	1.00	1.00	1.02	1.00	1.00	1.00
200	0.01	0.00	96.12	91.92	1.00	1.00	1.02	1.00	1.00	1.00
300	0.01	0.00	105.85	98.28	1.00	1.00	1.02	1.01	1.00	1.00
400	0.01	0.01	112.46	96.77	1.01	1.01	1.02	1.01	1.01	1.01
500	0.02	0.01	110.59	98.15	1.01	1.00	1.02	1.00	1.01	1.01
600	0.02	0.02	104.64	100.65	1.01	1.01	1.02	1.01	1.01	1.01
700	0.02	0.02	103.84	110.47	1.01	1.01	1.02	1.01	1.01	1.01
800	0.03	0.03	100.15	110.38	1.01	1.01	1.02	1.01	1.01	1.01
900	0.03	0.02	107.39	101.47	1.01	1.01	1.02	1.01	1.01	1.01
1000	0.03	0.03	96.30	107.10	1.01	1.01	1.02	1.01	1.01	1.01
1200	0.04	0.03	98.73	104.72	1.01	1.00	1.03	1.01	1.01	1.02
1400	0.04	0.03	103.08	110.92	1.01	1.00	1.03	1.01	1.01	1.02
1600	0.04	0.04	96.87	99.20	1.01	1.00	1.03	1.01	1.01	1.03
1800	0.04	0.04	96.58	106.15	1.02	1.01	1.04	1.02	1.01	1.04
2000	0.05	0.04	107.71	102.69	1.02	1.01	1.04	1.02	1.02	1.04
2200	0.05	0.05	97.49	100.39	1.02	1.01	1.05	1.02	1.02	1.05
2400	0.06	0.05	105.42	99.98	1.03	1.02	1.05	1.03	1.03	1.06
2600	0.06	0.05	99.55	99.43	1.04	1.03	1.06	1.04	1.04	1.06
2800	0.06	0.06	98.24	109.25	1.04	1.04	1.07	1.04	1.05	1.07
3000	0.07	0.06	104.29	97.60	1.06	1.05	1.08	1.06	1.06	1.08
3200	0.07	0.07	109.25	100.94	1.07	1.07	1.09	1.07	1.08	1.09
3400	0.08	0.07	106.32	100.02	1.08	1.08	1.10	1.08	1.09	1.10
3600	0.08	0.08	102.77	95.06	1.10	1.09	1.11	1.09	1.11	1.10
4000	0.09	0.08	99.77	98.06	1.13	1.13	1.13	1.13	1.15	1.12
4500	0.11	0.10	106.11	97.83	1.17	1.16	1.15	1.17	1.20	1.13
5000	0.13	0.12	104.21	101.78	1.20	1.19	1.17	1.20	1.24	1.14
5500	0.14	0.13	101.96	102.19	1.22	1.20	1.18	1.22	1.26	1.15
6000	0.15	0.13	99.57	98.12	1.21	1.19	1.18	1.21	1.25	1.14
6500	0.14	0.13	99.81	102.85	1.19	1.18	1.17	1.19	1.20	1.13
7000	0.15	0.14	97.28	91.22	1.18	1.16	1.16	1.17	1.13	1.12
7500	0.16	0.14	92.83	96.28	1.17	1.16	1.15	1.18	1.08	1.12
8000	0.16	0.15	92.71	95.31	1.15	1.15	1.12	1.15	1.09	1.11
8500	0.17	0.16	92.57	91.25	1.14	1.13	1.10	1.14	1.15	1.10
9000	0.17	0.16	91.91	95.16	1.11	1.11	1.08	1.12	1.20	1.10
9500	0.17	0.15	92.48	93.43	1.09	1.08	1.07	1.10	1.23	1.10
10000	0.17	0.15	97.02	95.67	1.08	1.06	1.07	1.09	1.26	1.11
12000	0.24	0.22	88.06	91.36	1.20	1.22	1.15	1.20	1.10	1.19
13000	0.26	0.23	88.09	92.04	1.18	1.20	1.18	1.19	1.17	1.23
14000	0.25	0.22	84.48	87.91	1.09	1.14	1.20	1.10	1.35	1.26
15000	0.27	0.24	83.12	85.37	1.05	1.12	1.17	1.05	1.27	1.22
16000	0.26	0.23	80.82	83.98	1.04	1.08	1.14	1.04	1.19	1.18
17000	0.26	0.22	77.68	83.01	1.04	1.09	1.17	1.03	1.14	1.21
18000	0.29	0.24	75.67	81.05	1.11	1.22	1.22	1.10	1.18	1.25



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110508

Xtra Long Life USB RF SPDT Switch B

USB-3SPDT-A18

Typical Performance Data

TEST CONDITIONS: @Temperature = +25degC

FREQUENCY (MHz)	INSERTION LOSS ON (dB)		ISOLATION OFF (dB)		VSWR IN (:1)		VSWR ENERGIZED (:1)		VSWR DE-ENERGIZED (:1)	
	COM-1	COM-2	COM-1	COM-2	ON	OFF	1	2	1	2
10	0.04	0.01	88.26	90.93	1.01	1.04	1.01	1.01	1.00	1.01
20	0.04	0.01	99.80	94.50	1.00	1.01	1.01	1.01	1.00	1.01
30	0.04	0.01	89.81	86.94	1.00	1.01	1.01	1.00	1.00	1.01
40	0.04	0.01	86.82	93.12	1.01	1.01	1.01	1.00	1.00	1.01
50	0.01	0.01	87.59	86.58	1.00	1.01	1.01	1.00	1.00	1.01
60	0.01	0.02	88.88	86.00	1.00	1.00	1.01	1.00	1.00	1.01
70	0.01	0.01	86.29	89.51	1.00	1.00	1.01	1.00	1.00	1.01
80	0.01	0.01	88.35	87.86	1.00	1.00	1.01	1.00	1.00	1.01
90	0.01	0.01	86.50	95.32	1.00	1.00	1.01	1.00	1.00	1.01
100	0.01	0.01	88.69	86.80	1.00	1.00	1.01	1.00	1.00	1.01
200	0.01	0.01	87.38	116.11	1.00	1.00	1.01	1.00	1.00	1.01
300	0.00	0.00	93.99	98.99	1.00	1.00	1.01	1.00	1.00	1.01
400	0.00	0.01	96.86	96.81	1.01	1.01	1.01	1.01	1.01	1.01
500	0.01	0.01	98.23	104.65	1.01	1.00	1.01	1.00	1.01	1.01
600	0.01	0.02	100.59	102.42	1.01	1.01	1.01	1.01	1.01	1.01
700	0.01	0.01	101.03	109.30	1.01	1.01	1.01	1.01	1.01	1.01
800	0.02	0.03	109.72	110.63	1.01	1.01	1.01	1.01	1.01	1.01
900	0.03	0.02	108.62	102.92	1.01	1.01	1.01	1.01	1.01	1.02
1000	0.03	0.03	114.60	112.11	1.01	1.01	1.02	1.01	1.01	1.02
1200	0.03	0.03	99.73	104.55	1.01	1.01	1.02	1.01	1.01	1.02
1400	0.04	0.03	110.62	100.01	1.01	1.00	1.03	1.00	1.01	1.03
1600	0.04	0.04	103.01	101.56	1.01	1.00	1.03	1.00	1.01	1.04
1800	0.05	0.04	97.32	108.68	1.01	1.01	1.04	1.01	1.01	1.05
2000	0.05	0.04	97.74	104.82	1.01	1.01	1.05	1.01	1.01	1.05
2200	0.05	0.05	104.28	96.29	1.02	1.01	1.06	1.01	1.02	1.06
2400	0.05	0.05	103.86	103.63	1.02	1.02	1.06	1.02	1.02	1.07
2600	0.05	0.06	98.14	99.95	1.03	1.03	1.07	1.03	1.03	1.08
2800	0.06	0.06	106.84	98.61	1.04	1.04	1.08	1.04	1.04	1.08
3000	0.06	0.06	108.11	100.39	1.05	1.05	1.09	1.05	1.06	1.09
3200	0.07	0.07	97.03	109.40	1.07	1.07	1.10	1.07	1.07	1.10
3400	0.08	0.07	100.14	115.46	1.08	1.09	1.11	1.08	1.09	1.11
3600	0.08	0.08	105.10	105.44	1.10	1.10	1.12	1.09	1.11	1.12
4000	0.09	0.08	103.27	104.55	1.13	1.14	1.14	1.13	1.15	1.14
4500	0.11	0.10	99.92	100.52	1.17	1.17	1.16	1.17	1.20	1.14
5000	0.13	0.12	100.97	117.68	1.21	1.21	1.18	1.20	1.25	1.15
5500	0.14	0.13	98.95	99.64	1.23	1.23	1.18	1.22	1.27	1.15
6000	0.15	0.13	100.49	102.86	1.22	1.22	1.18	1.22	1.26	1.14
6500	0.14	0.13	101.84	98.14	1.20	1.21	1.17	1.20	1.22	1.12
7000	0.15	0.13	97.69	98.21	1.19	1.19	1.16	1.19	1.16	1.11
7500	0.16	0.15	104.17	96.97	1.19	1.19	1.15	1.19	1.11	1.11
8000	0.16	0.15	98.58	93.00	1.17	1.18	1.13	1.17	1.11	1.10
8500	0.17	0.16	95.81	92.17	1.16	1.16	1.11	1.16	1.16	1.10
9000	0.17	0.16	95.77	93.24	1.14	1.15	1.10	1.14	1.22	1.10
9500	0.17	0.15	94.90	94.27	1.12	1.12	1.08	1.12	1.27	1.11
10000	0.17	0.15	91.17	91.95	1.11	1.11	1.08	1.12	1.31	1.13
12000	0.26	0.23	93.26	88.47	1.27	1.28	1.19	1.26	1.13	1.25
13000	0.27	0.25	88.17	87.69	1.26	1.26	1.23	1.25	1.20	1.30
14000	0.24	0.22	85.78	87.45	1.16	1.17	1.26	1.17	1.40	1.33
15000	0.25	0.24	83.54	83.78	1.11	1.11	1.22	1.11	1.29	1.29
16000	0.24	0.23	82.30	81.42	1.08	1.04	1.14	1.08	1.21	1.25
17000	0.23	0.22	81.21	82.26	1.07	1.03	1.17	1.06	1.14	1.31
18000	0.24	0.24	77.89	80.10	1.17	1.17	1.25	1.16	1.16	1.35



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Xtra Long Life USB RF SPDT Switch C

USB-3SPDT-A18

Typical Performance Data

TEST CONDITIONS: @Temperature = +25degC

FREQUENCY (MHz)	INSERTION LOSS ON (dB)		ISOLATION OFF (dB)		VSWR IN (:1)		VSWR ENERGIZED (:1)		VSWR DE-ENERGIZED (:1)	
	COM-1	COM-2	COM-1	COM-2	ON	OFF	1	2	1	2
10	0.05	0.00	98.98	86.03	1.01	1.04	1.01	1.01	1.01	1.01
20	0.04	0.02	99.03	88.45	1.00	1.01	1.01	1.01	1.00	1.01
30	0.04	0.01	84.50	87.48	1.00	1.01	1.01	1.00	1.00	1.01
40	0.04	0.02	88.40	86.92	1.01	1.01	1.01	1.00	1.00	1.01
50	0.01	0.02	88.64	88.97	1.00	1.01	1.01	1.00	1.00	1.01
60	0.02	0.02	101.30	89.51	1.00	1.00	1.01	1.00	1.00	1.01
70	0.01	0.01	98.60	88.67	1.00	1.00	1.01	1.00	1.00	1.01
80	0.01	0.01	96.57	88.07	1.00	1.00	1.01	1.00	1.00	1.01
90	0.01	0.01	86.48	96.59	1.00	1.00	1.01	1.00	1.00	1.01
100	0.01	0.01	93.11	88.57	1.00	1.00	1.01	1.00	1.00	1.01
200	0.01	0.01	93.94	89.40	1.00	1.00	1.01	1.00	1.00	1.01
300	0.00	0.00	107.44	97.20	1.01	1.01	1.01	1.01	1.00	1.01
400	0.00	0.00	95.79	100.25	1.01	1.01	1.01	1.01	1.00	1.01
500	0.01	0.01	100.20	99.27	1.01	1.01	1.01	1.00	1.01	1.01
600	0.01	0.02	115.66	93.12	1.01	1.01	1.01	1.01	1.01	1.01
700	0.01	0.01	101.02	93.44	1.01	1.01	1.01	1.00	1.01	1.01
800	0.02	0.03	103.13	101.66	1.01	1.01	1.01	1.01	1.01	1.01
900	0.03	0.02	98.25	105.11	1.01	1.01	1.01	1.00	1.01	1.01
1000	0.03	0.03	103.31	93.77	1.01	1.01	1.02	1.01	1.01	1.01
1200	0.03	0.03	109.39	101.23	1.01	1.01	1.02	1.00	1.01	1.02
1400	0.03	0.03	107.73	106.92	1.01	1.01	1.02	1.00	1.01	1.02
1600	0.04	0.04	100.91	100.66	1.01	1.01	1.03	1.00	1.00	1.03
1800	0.05	0.04	104.60	114.25	1.02	1.02	1.03	1.01	1.01	1.03
2000	0.05	0.04	96.00	103.80	1.02	1.02	1.04	1.01	1.01	1.04
2200	0.05	0.05	101.32	94.03	1.02	1.02	1.05	1.02	1.02	1.04
2400	0.05	0.06	107.35	112.62	1.02	1.03	1.05	1.02	1.02	1.05
2600	0.05	0.05	98.95	99.77	1.03	1.04	1.06	1.03	1.04	1.06
2800	0.06	0.06	99.55	102.72	1.04	1.05	1.07	1.04	1.05	1.07
3000	0.06	0.06	101.95	113.74	1.05	1.05	1.08	1.05	1.06	1.07
3200	0.07	0.07	101.09	109.23	1.06	1.07	1.08	1.06	1.07	1.08
3400	0.08	0.07	107.85	108.54	1.08	1.09	1.09	1.08	1.09	1.09
3600	0.08	0.08	104.23	96.18	1.09	1.09	1.10	1.09	1.11	1.10
4000	0.09	0.08	99.67	112.83	1.12	1.13	1.11	1.12	1.15	1.12
4500	0.10	0.10	104.05	109.30	1.16	1.16	1.13	1.16	1.19	1.14
5000	0.12	0.12	98.19	101.44	1.20	1.20	1.14	1.19	1.24	1.15
5500	0.14	0.13	97.37	104.32	1.21	1.22	1.15	1.21	1.26	1.16
6000	0.14	0.14	101.60	113.28	1.21	1.21	1.15	1.22	1.25	1.16
6500	0.14	0.14	98.95	99.65	1.20	1.21	1.14	1.20	1.22	1.16
7000	0.15	0.14	100.28	98.04	1.19	1.19	1.14	1.19	1.16	1.15
7500	0.16	0.15	96.81	102.18	1.19	1.20	1.13	1.20	1.10	1.15
8000	0.16	0.16	96.65	94.09	1.18	1.19	1.12	1.18	1.11	1.14
8500	0.18	0.17	94.22	94.74	1.16	1.18	1.11	1.17	1.16	1.13
9000	0.17	0.17	93.78	96.62	1.14	1.16	1.11	1.14	1.23	1.12
9500	0.17	0.16	93.35	95.70	1.11	1.13	1.10	1.12	1.28	1.12
10000	0.17	0.16	93.31	91.07	1.10	1.12	1.11	1.11	1.31	1.11
12000	0.25	0.24	91.88	87.81	1.25	1.26	1.24	1.25	1.12	1.18
13000	0.27	0.26	87.30	89.39	1.25	1.25	1.28	1.25	1.19	1.23
14000	0.24	0.24	84.52	85.35	1.18	1.17	1.29	1.17	1.36	1.28
15000	0.25	0.26	81.65	82.03	1.11	1.11	1.25	1.13	1.30	1.26
16000	0.25	0.24	80.12	81.81	1.07	1.08	1.22	1.06	1.29	1.21
17000	0.23	0.23	78.57	81.57	1.06	1.07	1.25	1.02	1.19	1.21
18000	0.24	0.24	76.80	76.93	1.11	1.14	1.31	1.10	1.11	1.24



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