

# TF-FWS-810W6-H25 Reliability Prediction Report (MTBF)

Report NO : 07P070004

**5-21-2007**

Issue Date

**Wenyuan Yang**

Manager

**Jessica Chou**

Test Engineer

## Reliability Prediction (MTBF)

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I . **Model Name:** TF-FWS-810W6-H25-A10

II . **Prediction Date:** May 21, 2007

III . **Prediction Site:** AAEON Q.E. Dept.

IV . **Predicted by:** Jessica Chou

V . **Equipment:** Relex Ver.7.3 Visual Reliability Software

### VI. Simulation Environment:

- Temperature: 25.9 degrees C
- Standard: Telcordia (Bellcore) Standard

### VII. Term and Definition:

- Unit : An assembly of device.
- Duty Cycle : Used to specify the percentage of time that the element is in an on state, and it is equal to the percentage of total time the item is in the active environment.
- Quantity : The quantity of the selected item.
- Failure Rate : Used to specify that the failure rate is to be calculated based the selected Calculation models. The multiplier is 1,000,000.
- MTBF : MTBF is always specified in hours.

### VIII. Prediction Result:

TF-FWS-810W6-H25-A10 :

Failure Rate: 14.636379 ppm

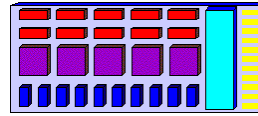
MTBF: 68,323 Hours

- FAN (1759281010) MTTF : 30 ° C / 606,120 Hrs
- LCM (9789810000) : LCD Lift 25 ° C / 45%RH : 50,000 Hrs
- Power supply (1757325004) :

The power supply have a minimum predicted MTBF(MIL-HDBK-217) of 100,000 hours of continuous operation at 25 ° C, maximum-output load, and nominal AC input voltage.

### AAEON Reliability Prediction Report

**Part Number** TF-FWS-810W6-H25-A10  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90

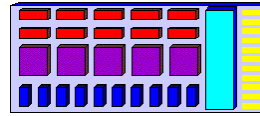


**Description** Top-level assembly  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.636379  
**MTBF** 68,323

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
TF-FWS-810W6-H25-A10	TF-FWS-810W6--H25-A10	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	14.636379	68,323
FWB-810-A10	9697B81004	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	14.245547	70,197
PER-R09P-A10	9697R09P01	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.032796	30,491,923
PER-T078-A10	9697T07802	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.349688	2,859,692
9761810004	Front Panel Module for FWS-810	Bellcore	Method I Case 3	GF, GU - Ground Fixed,		1.00	0.008348	119,789,699

**AAEON Reliability Prediction Report**

**Part Number** 9697B81004  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90

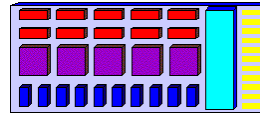


**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.245547  
**MTBF** 70,197

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1231232720	Miscellaneous	Y2	Bellcore Issue 6	Level I		0.150000	1.00	1.0530	0.150000	6666666.67
1750220320	Connection	BAT1	Bellcore Issue 6	Level I		0.001193	1.00	.0084	0.001193	838527891.23
1759100002	Miscellaneous	BZ1	Bellcore Issue 6	Level I		0.150000	1.00	1.0530	0.150000	6666666.67
1653003100	Connection	CN2,SCF1	Bellcore Issue 6	Level I		0.001789	2.00	.0251	0.003578	559018594.16
1653003200	Connection	CN3	Bellcore Issue 6	Level I		0.003578	1.00	.0251	0.003578	279509297.08
1653004200	Connection	FP1,FP2	Bellcore Issue 6	Level I		0.003578	2.00	.0502	0.007155	279509297.08
1653005200	Connection	USB1,USB2	Bellcore Issue 6	Level I		0.005963	2.00	.0837	0.011926	167705578.25
1653008200	Connection	CN1	Bellcore Issue 6	Level I		0.009541	1.00	.0670	0.009541	104815986.40
1653300100	Connection	CN2,FP1,SCF1	Bellcore Issue 6	Level I		0.001193	3.00	.0251	0.003578	838527891.23
1655004011	Connection	PWR1	Bellcore Issue 6	Level I		0.002385	1.00	.0167	0.002385	419263945.62
1750119011	Miscellaneous	BAT1	Bellcore Issue 6	Level I		0.900000	1.00	6.3178	0.900000	1111111.11
1653205203	Connection	COM2	Bellcore Issue 6	Level I		0.005963	1.00	.0419	0.005963	167705578.25
1119633191	Capacitor	EC18,EC27,EC32,EC34,EC37-EC4-0,EC42,EC43,EC46-EC48	Bellcore Issue 6	Level I		0.044721	13.00	4.0811	0.581376	22360743.77
1655003010	Connection	FAN1-FAN3	Bellcore Issue 6	Level I		0.001789	3.00	.0377	0.005367	559018594.16
1653008100	Connection	JTAG1	Bellcore Issue 6	Level I		0.004770	1.00	.0335	0.004770	209631972.81
1653220208	Connection	IDE1	Bellcore Issue 6	Level I		0.023851	1.00	.1674	0.023851	41926394.56
1812850290	Semiconductor	VR1	Bellcore Issue 6	Level I		0.081683	1.00	.5734	0.081683	12242484.67
1231125051	Miscellaneous	Y3-Y8	Bellcore Issue 6	Level I		0.150000	6.00	6.3178	0.900000	6666666.67
1655404020	Connection	ATX1	Bellcore Issue 6	Level I		0.002385	1.00	.0167	0.002385	419263945.62
1111610192	Capacitor	EC23-EC26,EC44,EC45	Bellcore Issue 6	Level I		0.044721	6.00	1.8836	0.268327	22360743.77
1654808304	Connection	USB3	Bellcore Issue 6	Level I		0.004770	1.00	.0335	0.004770	209631972.81
1653900034	Connection	CFD1	Bellcore Issue 6	Level I		0.001193	1.00	.0084	0.001193	838527891.23
165440910B	Connection	COM1	Bellcore Issue 6	Level I		0.005367	1.00	.0377	0.005367	186339531.39
1119612291	Capacitor	EC14,EC28,EC35	Bellcore Issue 6	Level I		0.074535	3.00	1.5697	0.223606	13416446.26
1111615212	Capacitor	EC5,EC6	Bellcore Issue 6	Level I		0.074535	2.00	1.0464	0.149071	13416446.26
1119647191	Capacitor	EC15,EC29,EC31,CE33,EC36,EC39	Bellcore Issue 6	Level I		0.074535	6.00	3.1393	0.447212	13416446.26
1111622102	Capacitor	EC10,EC11,EC30	Bellcore Issue 6	Level I		0.044721	3.00	.9418	0.134164	22360743.77
1169656190	Capacitor	EC12,EC13,EC16,EC19,EC2,EC20-EC3,EC4,EC7,EC8	Bellcore Issue 6	Level I		0.005498	10.00	.3859	0.054978	181892521.70
1211101161	Inductor	L3	Bellcore Issue 6	Level I		0.087701	1.00	.6156	0.087701	11402325.42
1655424020	Connection	ATX2	Bellcore Issue 6	Level I		0.014311	1.00	.1005	0.014311	69877324.27

### AAEON Reliability Prediction Report

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**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90

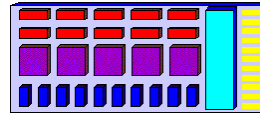


**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.245547  
**MTBF** 70,197

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1654907003	Connection	SATA1,SATA2	Bellcore Issue 6	Level I		0.004174	2.00	.0586	0.008348	239579397.50
1111610212	Capacitor	EC17,EC41	Bellcore Issue 6	Level I		0.074535	2.00	1.0464	0.149071	13416446.26
1651592492	Connection	DIM1,DIM2	Bellcore Issue 6	Level I		0.109716	2.00	1.5404	0.219432	9114433.60
1304414610	Semiconductor	PSALED1	Bellcore Issue 6	Level I		0.005294	1.00	.0372	0.005294	188909072.26
1601110201	Connection	RSW1	Bellcore Issue 6	Level I		0.002385	1.00	.0167	0.002385	419263945.62
1653212203	Connection	LCMA1	Bellcore Issue 6	Level I		0.014311	1.00	.1005	0.014311	69877324.27
1751300002	Connection	RELAY1-RELAY8	Bellcore Issue 6	Level I		0.001193	8.00	.0670	0.009541	838527891.23
165251220B	Connection	LAN1-LAN6	Bellcore Issue 6	Level I		0.007155	6.00	.3014	0.042932	139754648.54
1181618100	Capacitor	EC1	Bellcore Issue 6	Level I		0.004616	1.00	.0324	0.004616	216644183.01
105A500233	Resistor	R17,R19,R604,R606	Bellcore Issue 6	Level I		0.002308	4.00	.0648	0.009232	433288366.03
105A501033	Resistor	R446,R844	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A700003	Resistor	R118,R119,R141,R198,R199,R226- R292,R294,R3,R307,R325,R33,R3- 45,R353	Bellcore Issue 6	Level I		0.002308	14.00	.2268	0.032311	433288366.03
105A700003	Resistor	R354,R355,R372,R38,R4,R40,R440- R445,R540,R546,R575,R584,R596- R633	Bellcore Issue 6	Level I		0.002308	14.00	.2268	0.032311	433288366.03
105A700003	Resistor	R639-R641,R643,R644,R646,R649- R650,R657,R658,R660,R665,R668- R673,R677	Bellcore Issue 6	Level I		0.002308	15.00	.2430	0.034619	433288366.03
105A700003	Resistor	R678,R680,R681,R686,R687,R689- R690,R700-R704,R706,R708,R709- R711	Bellcore Issue 6	Level I		0.002308	16.00	.2592	0.036927	433288366.03
105A700003	Resistor	R712,R714,R715,R717,R722-R729- R738-R741,R750,R751,R753,R754- R759	Bellcore Issue 6	Level I		0.002308	21.00	.3402	0.048467	433288366.03
105A700003	Resistor	R760,R762,R763,R768,R769,R771- R772,R777,R778,R780,R781,R793- R796	Bellcore Issue 6	Level I		0.002308	13.00	.2106	0.030003	433288366.03
105A700003	Resistor	R797-R803,R835,R836,R845,R847- R852,R856,R859,R861,R864,R867- R868	Bellcore Issue 6	Level I		0.002308	22.00	.3564	0.050774	433288366.03
105A700003	Resistor	R870-R872,R883-R888,R891,R893- R894,R902-R907	Bellcore Issue 6	Level I		0.002308	18.00	.2916	0.041543	433288366.03
105A702203	Resistor	R100-R102,R106,R107,R146,R581- R60,R61,R67,R73,R76,R77,R80-R- 83,R86,R87	Bellcore Issue 6	Level I		0.002308	19.00	.3078	0.043851	433288366.03

**AAEON Reliability Prediction Report**

**Part Number** 9697B81004  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90

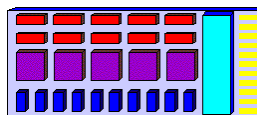


**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.245547  
**MTBF** 70,197

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A702203	Resistor	R90,R92,R93	Bellcore Issue 6	Level I		0.002308	3.00	.0486	0.006924	433288366.03
105A702223	Resistor	R250,R254,R256,R653,R679,R683- ,R688,R747,R752,R756,R761,R765- ,R770	Bellcore Issue 6	Level I		0.002308	13.00	.2106	0.030003	433288366.03
105A702223	Resistor	R774,R779	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A703323	Resistor	R139,R151,R545,R548,R549	Bellcore Issue 6	Level I		0.002308	5.00	.0810	0.011540	433288366.03
105A704703	Resistor	R195,R196,R311,R313	Bellcore Issue 6	Level I		0.002308	4.00	.0648	0.009232	433288366.03
105A704723	Resistor	R10,R11,R181,R201,R208,R293,R- 381,R423,R428,R431,R434,R437,R- 441,R443	Bellcore Issue 6	Level I		0.002308	14.00	.2268	0.032311	433288366.03
105A704723	Resistor	R444,R550,R551,R590,RR592,R6,- R7,R792,R795,R8,R896,R899,R9	Bellcore Issue 6	Level I		0.002308	13.00	.2106	0.030003	433288366.03
105A705623	Resistor	R211,R277,R295	Bellcore Issue 6	Level I		0.002308	3.00	.0486	0.006924	433288366.03
105A708223	Resistor	R117,R154-R158,R165-R170,R172- ,R173,R182,R185-R187,R189,R206- ,R207	Bellcore Issue 6	Level I		0.002308	21.00	.3402	0.048467	433288366.03
105A708223	Resistor	R213,R225,R231,R233,R241,R246- ,R253,R258,R259,R262,R301,R587- ,R600	Bellcore Issue 6	Level I		0.002308	13.00	.2106	0.030003	433288366.03
105A708223	Resistor	R609,R612	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A700133	Resistor	R129,R14,R144,R15,R153,R160,R- 163,R174,R176,R248,R257,R281,R- 286,R327	Bellcore Issue 6	Level I		0.002308	14.00	.2268	0.032311	433288366.03
105A700133	Resistor	R336,R386,R395,R404,R413,R451- ,R47,R53,R62,R63,R647,R648,R68- 2,R691	Bellcore Issue 6	Level I		0.002308	14.00	.2268	0.032311	433288366.03
105A700133	Resistor	R718-R721,R742-R746,R755,R764- ,R773,R782,R811,R828-R834	Bellcore Issue 6	Level I		0.002308	21.00	.3402	0.048467	433288366.03
105A733003	Resistor	R143,R214,R452,R460-R467,R517- ,R520,R521,R523,R525,R527,R531- ,R541,R542	Bellcore Issue 6	Level I		0.002308	20.00	.3240	0.046159	433288366.03
105A701033	Resistor	R12,R171,R175,R180,R183,R188,- R192,R20,R200,R222,R236,R243-- R245,R247	Bellcore Issue 6	Level I		0.002308	15.00	.2430	0.034619	433288366.03
105A701033	Resistor	R251,R260,R261,R263,R268,R269- ,R273,R274,R309,R314,R363-R366- ,R436	Bellcore Issue 6	Level I		0.002308	15.00	.2430	0.034619	433288366.03
105A701033	Resistor	R438,R448,R580,R582,R585,R586- ,R595,R597-R599,R601,R603,R608- ,R610	Bellcore Issue 6	Level I		0.002308	14.00	.2268	0.032311	433288366.03

### AAEON Reliability Prediction Report

**Part Number** 9697B81004  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90

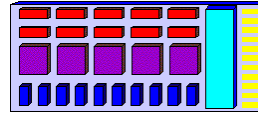


**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.245547  
**MTBF** 70,197

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A701033	Resistor	R611,R614-R616,R619,R621,R64--R66,R804,R805,R853	Bellcore Issue 6	Level I		0.002308	12.00	.1944	0.027695	433288366.03
105A715003	Resistor	R869	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A715033	Resistor	R547	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A702733	Resistor	R164,R562	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A747003	Resistor	R289,R454,R602	Bellcore Issue 6	Level I		0.002308	3.00	.0486	0.006924	433288366.03
1059700001	Resistor	R425,R429	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A500133	Resistor	R147,R43	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A501533	Resistor	R846	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A502833	Resistor	R447	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A504763	Resistor	R556,R560,R567	Bellcore Issue 6	Level I		0.002308	3.00	.0486	0.006924	433288366.03
105A505103	Resistor	R216,R45,R98	Bellcore Issue 6	Level I		0.002308	3.00	.0486	0.006924	433288366.03
105A507503	Resistor	R323,R324,R588,R591,R593,R783--R790,R794,R812-R827	Bellcore Issue 6	Level I		0.002308	30.00	.4860	0.069238	433288366.03
105A510003	Resistor	R2,R223,R5	Bellcore Issue 6	Level I		0.002308	3.00	.0486	0.006924	433288366.03
105A514703	Resistor	R230,R232	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A515003	Resistor	R123,R177,R179,R270,R30,R538,-R544,R625,R791	Bellcore Issue 6	Level I		0.002308	9.00	.1458	0.020771	433288366.03
105A524913	Resistor	R605,R607	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A530123	Resistor	R191,R193,R267,R276	Bellcore Issue 6	Level I		0.002308	4.00	.0648	0.009232	433288366.03
105A534003	Resistor	R516,R543	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A549913	Resistor	R127	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A549963	Resistor	R328-R335,R337-R344,R387-R394-,R396-R403,R405-R412,R414-R421-,R70,R72	Bellcore Issue 6	Level I		0.002308	50.00	.8101	0.115397	433288366.03
105A549963	Resistor	R75,R79,R84,R88	Bellcore Issue 6	Level I		0.002308	4.00	.0648	0.009232	433288366.03
105A701523	Resistor	R159	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A702033	Resistor	R280	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A702703	Resistor	R23	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A703903	Resistor	R573	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A706233	Resistor	R296,R299,R662,R664,R670,R675	Bellcore Issue 6	Level I		0.002308	6.00	.0972	0.013848	433288366.03
105A720003	Resistor	R148,R302,R308,R347,R350,R351-,R352,R433,R52,R54,R574,R578,R-59	Bellcore Issue 6	Level I		0.002308	13.00	.2106	0.030003	433288366.03

**AAEON Reliability Prediction Report**

**Part Number** 9697B81004  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90



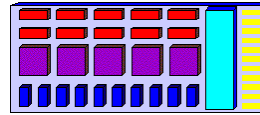
**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.245547  
**MTBF** 70,197

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A747033	Resistor	R112-R115,R457,R458	Bellcore Issue 6	Level I		0.002308	6.00	.0972	0.013848	433288366.03
105A756033	Resistor	R108-R111,R456,R459	Bellcore Issue 6	Level I		0.002308	6.00	.0972	0.013848	433288366.03
105A768003	Resistor	R576	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A501003	Resistor	R103-R105,R303,R310,R357,R358-R360,R671,R69,R71,R74,R78	Bellcore Issue 6	Level I		0.002308	13.00	.2106	0.030003	433288366.03
1212306030	Inductor	FB1,FB2,FB21,FB23,FB24,FB27-FB29,FB3,FB30-FB32,FB39-FB42,F-B45	Bellcore Issue 6	Level I		0.002308	17.00	.2754	0.039235	433288366.03
1212308054	Inductor	FB16,FB19,FB22,FB4,FB5,FB50,F-B6-FB8	Bellcore Issue 6	Level I		0.002308	9.00	.1458	0.020771	433288366.03
1121501680	Capacitor	M1,M10,M100-M118,M11,M12,M120-M133,M13,M135,M136,M140,M142-M155	Bellcore Issue 6	Level I		0.004616	42.00	1.3609	0.193866	216644183.01
1121501680	Capacitor	M157,M159-M163,M165-M195,M17-M19,M197-M209,M2,M21,M210-M214,M219	Bellcore Issue 6	Level I		0.004616	61.00	1.9765	0.281568	216644183.01
1121501680	Capacitor	M220-M229,M3,M30,M31,M33,M35-M36,M38,M4,M40,M41,M45,M48--M50,M5,M56	Bellcore Issue 6	Level I		0.004616	26.00	.8425	0.120012	216644183.01
1121501680	Capacitor	M58-M60,M6,M67,M7,M77-M84,M8-M86,M87,M90,M91,M95-M99	Bellcore Issue 6	Level I		0.004616	24.00	.7777	0.110781	216644183.01
1121722780	Capacitor	C100,C214	Bellcore Issue 6	Level I		0.004616	2.00	.0648	0.009232	216644183.01
1124410080	Capacitor	C163,C165,C168-C172,C174,C175-C177-C184,C188,C189,C191,C20,-C29,C54	Bellcore Issue 6	Level I		0.004616	23.00	.7452	0.106165	216644183.01
1124410080	Capacitor	C55,C57-C59	Bellcore Issue 6	Level I		0.004616	4.00	.1296	0.018463	216644183.01
1124510280	Capacitor	C164,C173,C176,C256,C263-C269-C297-C312	Bellcore Issue 6	Level I		0.004616	27.00	.8749	0.124628	216644183.01
1124522280	Capacitor	C152,C75	Bellcore Issue 6	Level I		0.004616	2.00	.0648	0.009232	216644183.01
1124527180	Capacitor	C128,C160,C53,C56,C8	Bellcore Issue 6	Level I		0.004616	5.00	.1620	0.023079	216644183.01
1124433080	Capacitor	C122,C126,C296,C315	Bellcore Issue 6	Level I		0.004616	4.00	.1296	0.018463	216644183.01
1129747650	Capacitor	C101,C115,C134,C153,C156,C157-C18,C210,C221,C235,C24,C245,C-246,C249	Bellcore Issue 6	Level I		0.004616	14.00	.4536	0.064622	216644183.01
1129747650	Capacitor	C25,C250-C252,C257-C260,C26,C-27,C274-C281,C28,C30-C32,C4,C4-9,C52,C61	Bellcore Issue 6	Level I		0.004616	26.00	.8425	0.120012	216644183.01
1129747650	Capacitor	C65-C67,C7,C72,C74,C83,C88	Bellcore Issue 6	Level I		0.004616	8.00	.2592	0.036927	216644183.01



**AAEON Reliability Prediction Report**

**Part Number** 9697B81004  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90

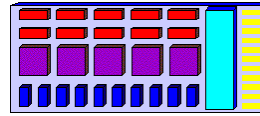


**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.245547  
**MTBF** 70,197

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1300283540	Semiconductor	D7,D8	Bellcore Issue 6	Level I		0.024505	2.00	.3440	0.049010	40808282.24
1301005440	Semiconductor	D4,D5	Bellcore Issue 6	Level I		0.024505	2.00	.3440	0.049010	40808282.24
1310222210	Semiconductor	Q14,Q15	Bellcore Issue 6	Level I		0.024505	2.00	.3440	0.049010	40808282.24
1124556280	Capacitor	C3	Bellcore Issue 6	Level I		0.004616	1.00	.0324	0.004616	216644183.01
1314108411	Integrated Circuit	U36,U37	Bellcore Issue 6	Level I		0.063394	2.00	.8900	0.126787	15774449.75
1651203291	Connection	U9	Bellcore Issue 6	Level I		0.019081	1.00	.1339	0.019081	52407993.20
14S4911216	Integrated Circuit	U4	Bellcore Issue 6	Level I		0.041424	1.00	.2908	0.041424	24140485.85
14S5900700	Integrated Circuit	U10	Bellcore Issue 6	Level I		0.039941	1.00	.2804	0.039941	25036779.98
1129610260	Capacitor	C313,C314,C326-C329	Bellcore Issue 6	Level I		0.004616	6.00	.1944	0.027695	216644183.01
1315700211	Semiconductor	Q1,Q12,Q2	Bellcore Issue 6	Level I		0.081683	3.00	1.7202	0.245048	12242484.67
14S5A01400	Integrated Circuit	U26	Bellcore Issue 6	Level I		0.063394	1.00	.4450	0.063394	15774449.75
105A520003	Resistor	R152	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A530003	Resistor	R97	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A505633	Resistor	R449,R450	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A512033	Resistor	R807	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A523233	Resistor	R806	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
1211104760	Inductor	L6,L7	Bellcore Issue 6	Level I		0.087701	2.00	1.2313	0.175403	11402325.42
105A530103	Resistor	R149	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A539263	Resistor	R209	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
1124418080	Capacitor	C159,C162,C254,C255,C261,C262-C287-C294	Bellcore Issue 6	Level I		0.004616	14.00	.4536	0.064622	216644183.01
1189610180	Capacitor	TC11,TC4,TC8	Bellcore Issue 6	Level I		0.004616	3.00	.0972	0.013848	216644183.01
1059710003	Resistor	R41,R427,R529,R530,R636,R638,-R693,R695,R697,R699	Bellcore Issue 6	Level I		0.002308	10.00	.1620	0.023079	433288366.03
1124701680	Capacitor	C1,C105,C107,C109,C110,C112,C-116,C121,C132,C133,C135,C138,C-144,C158	Bellcore Issue 6	Level I		0.004616	14.00	.4536	0.064622	216644183.01
1124701680	Capacitor	C167,C185-C187,C19,C190,C192,-C193,C196,C202-C207,C211-C213-C215-C220	Bellcore Issue 6	Level I		0.004616	24.00	.7777	0.110781	216644183.01
1124701680	Capacitor	C224-C231,C233,C234,C237-C241-C244,C247,C248,C253,C270-C273-C282	Bellcore Issue 6	Level I		0.004616	24.00	.7777	0.110781	216644183.01

### AAEON Reliability Prediction Report

**Part Number** 9697B81004  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90

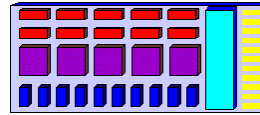


**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.245547  
**MTBF** 70,197

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1124701680	Capacitor	C286,C295,C316,C33-C44,C5,C50-,C51,C6,C60,C62,C63,C70,C71,C7-3,C77-C82	Bellcore Issue 6	Level I		0.004616	31.00	1.0045	0.143092	216644183.01
1124701680	Capacitor	C84,C86,C89,C9,C90,C94-C98	Bellcore Issue 6	Level I		0.004616	10.00	.3240	0.046159	216644183.01
1310390411	Semiconductor	Q10,Q11,Q18,Q19,Q3,Q30-Q37,Q4-Q7	Bellcore Issue 6	Level I		0.024505	15.00	2.5803	0.367572	40808282.24
105A503300	Resistor	R197,R202,R291,R31,R32,R35,R36-R808-R810	Bellcore Issue 6	Level I		0.002308	10.00	.1620	0.023079	433288366.03
1181633080	Capacitor	TC1,TC10,TC2,TC5-TC7,TC9	Bellcore Issue 6	Level I		0.004616	7.00	.2268	0.032311	216644183.01
105A510053	Resistor	R255,R275,R442	Bellcore Issue 6	Level I		0.013848	3.00	.2916	0.041543	72214727.67
1540747285	Resistor	RN1,RN2,RN59,RN68-RN71	Bellcore Issue 6	Level I		0.006508	7.00	.3198	0.045553	153667283.55
1540733085	Resistor	RN27-RN32,RN34,RN36,RN43,RN-45,RN48,RN53	Bellcore Issue 6	Level I		0.006508	12.00	.5482	0.078091	153667283.55
14S5A23200	Integrated Circuit	U34,U35	Bellcore Issue 6	Level I		0.063394	2.00	.8900	0.126787	15774449.75
105A501123	Resistor	R44	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
1174518180	Capacitor	CP1-CP8	Bellcore Issue 6	Level I		0.005498	8.00	.3087	0.043982	181892521.70
105A502003	Resistor	R594	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A506823	Resistor	R426	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A523723	Resistor	R125	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
1540722085	Resistor	RN64-RN67	Bellcore Issue 6	Level I		0.006508	4.00	.1827	0.026030	153667283.55
1540700081	Resistor	RN63	Bellcore Issue 6	Level I		0.000000	1.00	.0000	0.000000	.00
1540782282	Resistor	RN3,RN4	Bellcore Issue 6	Level I		0.006508	2.00	.0914	0.013015	153667283.55
105A702263	Resistor	R1,R21,R34,R552,R553,R555,R557-R559,R561,R563,R566	Bellcore Issue 6	Level I		0.002308	12.00	.1944	0.027695	433288366.03
14S3115000	Integrated Circuit	U8	Bellcore Issue 6	Level I		0.063394	1.00	.4450	0.063394	15774449.75
105A547503	Resistor	R68	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A561963	Resistor	R22,R99	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A524963	Resistor	R617	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
1651608990	Connection	CPU1	Bellcore Issue 6	Level I		0.001193	1.00	.0084	0.001193	838527891.23
1211110080	Inductor	L12,L43	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
121230603C	Inductor	FB11,FB17,FB18,FB20,FB38,FB43,-FB44,FB9	Bellcore Issue 6	Level I		0.002308	8.00	.1296	0.018463	433288366.03
14S2303700	Integrated Circuit	U11,U2	Bellcore Issue 6	Level I		0.063394	2.00	.8900	0.126787	15774449.75
121230603D	Inductor	FB10,FB12,FB13-FB15	Bellcore Issue 6	Level I		0.002308	5.00	.0810	0.011540	433288366.03

### AAEON Reliability Prediction Report

**Part Number** 9697B81004  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90



**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 14.245547  
**MTBF** 70,197

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
105A706203	Resistor	R190,R24-R29,R50,R55,R56,R568-,R569,R571,R572,R577,R58,R95,R-96	Bellcore Issue 6	Level I		0.002308	18.00	.2916	0.041543	433288366.03
14S9660100	Integrated Circuit	U38-U40	Bellcore Issue 6	Level I		0.063394	3.00	1.3350	0.190181	15774449.75
1654262300	Connection	MPC11	Bellcore Issue 6	Level I		0.073939	1.00	.5190	0.073939	13524643.41
1211100109	Inductor	L44	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
1211108270	Inductor	L42	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A522603	Resistor	R224,R235	Bellcore Issue 6	Level I		0.002308	2.00	.0324	0.004616	433288366.03
105A513703	Resistor	R178	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
105A522663	Resistor	R184	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03
1653925216	Connection	CFD1	Bellcore Issue 6	Level I		0.029814	1.00	.2093	0.029814	33541115.65
14S6334605	Integrated Circuit	U41-U46	Bellcore Issue 6	Level I		0.032674	6.00	1.3762	0.196044	30605440.50
1121701080	Capacitor	C104,C106,C139,C140,C146-C148-,C150,C151,C154,C161,C166,C195-C197	Bellcore Issue 6	Level I		0.004616	14.00	.4536	0.064622	216644183.01
1121701080	Capacitor	C198,C2,C200,C201,C208,C222,C-232,C242,C243,C331-C333,C91-C-93,C99	Bellcore Issue 6	Level I		0.004616	16.00	.5184	0.073854	216644183.01
105A704709	Resistor	R121,R122,R128,R130-R136,R138-,R140,R142,R161,R162,R210,R215-R219	Bellcore Issue 6	Level I		0.002308	18.00	.2916	0.041543	433288366.03
105A704709	Resistor	R228,R234,R237,R239,R240,R242-,R252,R264,R265,R271,R272,R278-R279	Bellcore Issue 6	Level I		0.002308	13.00	.2106	0.030003	433288366.03
105A704709	Resistor	R282-R285,R287,R288,R290,R304-,R306,R589,R622-R624,R627-R631	Bellcore Issue 6	Level I		0.002308	18.00	.2916	0.041543	433288366.03
1540756081	Resistor	RN10-RN16,RN19-RN24,RN33,RN-35,RN38-RN41,RN44,RN46,RN47,-RN49,RN5,RN50	Bellcore Issue 6	Level I		0.006508	25.00	1.1420	0.162689	153667283.55
1540756081	Resistor	RN51,RN52,RN54-RN56,RN58,RN6-,RN60-RN62,RN7-RN9	Bellcore Issue 6	Level I		0.006508	13.00	.5939	0.084598	153667283.55
1129722060	Capacitor	C136,C236,C330,C45-C48	Bellcore Issue 6	Level I		0.004616	7.00	.2268	0.032311	216644183.01
14S9820800	Integrated Circuit	U47	Bellcore Issue 6	Level I		0.041424	1.00	.2908	0.041424	24140485.85
106B701032	Resistor	RT1	Bellcore Issue 6	Level I		0.011926	1.00	.0837	0.011926	83852789.12
1129610051	Capacitor	C11,C114,C12,C127,C13-C17,C199-,C209,C21-C23,C285	Bellcore Issue 6	Level I		0.004616	15.00	.4860	0.069238	216644183.01
105A538323	Resistor	R18	Bellcore Issue 6	Level I		0.002308	1.00	.0162	0.002308	433288366.03



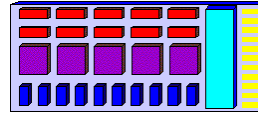






### AAEON Reliability Prediction Report

**Part Number** Front Panel Module for FWS-810  
**Reference Des**  
**Date** 05. 21, 2007  
**Environment** GF, GU - Ground Fixed, Uncontrolled  
**Temp. (°C)** 25.90



**Description**  
**File Name** TF-FWS-810W6-H25-A10.-  
**Time** 11:38 上午  
**Failure Rate** 0.008348  
**MTBF** 119,789,699

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate, %	Failure Rate	MTBF, Unit
1653007200	Connection	HEADER	Bellcore Issue 6	Level I		0.008348	1.00	100.0000	0.008348	119789698.75