Industrial Computing Platform Partner

www.aaeon.com.tw

PER-C20S
Reliability Prediction Report (MTBF)

Report NO： 06E070014

9-04-2006	Wenyuan Yang	Jessica Chou
Issue Date	Manager	Test Engineer

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1515
http://www.aaeon.com.tw

Reliability Prediction (MTBF)

Ⅰ. Model Name: PER-C20S

Ⅱ. Prediction Date: Sep. 4, 2006

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: 27.9 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.

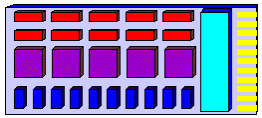
Ⅷ. Prediction Result:

- PER-C20S
  - Failure Rate: 1.077975 ppm
  - MTBF: 927,665 Hours

AAEON Technology Inc.
5F, No.135, Lane 235, Pao Chiao Rd.,
Hsin-Tien City, Taipei, Taiwan, R.O.C.
TEL: +886-2-8919-1234
FAX: +886-2-8919-1515
http://www.aaeon.com.tw

AAEON Reliability Prediction Report

Part Number 9697C20S02
Reference Des
Date 09. 4, 2006
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (℃) 27.90

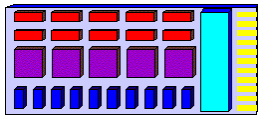


Description Top-level assembly
File Name PER-C20S.RPJ
Time 10:28 上午
Failure Rate 1.077975
MTBF 927,665

Assembly Name	Part Number	Model	Method	Environment	Duty Cycle	Qty	Failure Rate	MTBF
PER-C20S	9697C20S02	Bellcore	Method I Case 3	GF, GU - Ground Fixed,	100.00	1.00	1.077975	927,665

AAEON Reliability Prediction Report

Part Number 9697C20S02
Reference Des
Date 09. 4, 2006
Environment GF, GU - Ground Fixed, Uncontrolled
Temp. (℃) 27.90



Description Top-level assembly
File Name PER-C20S.RPJ
Time 10:28 上午
Failure Rate 1.077975
MTBF 927,665

Part Number	Category	Location	Calculation Model	Quality	Tem. Rise	Failure Rate, Unit	Quantity	Failure Rate,%	Failure Rate	MTBF, Unit
1653002100	Connection	JP1,JP2	Bellcore Issue 6	Level I		0.001322	2.00	.2453	0.002644	756315453.06
1654907002	Connection	CN1,CN2	Bellcore Issue 6	Level I		0.004628	2.00	.8586	0.009255	216090129.44
105A700003	Resistor	FB1,R8	Bellcore Issue 6	Level I		0.002399	2.00	.4451	0.004798	416842100.98
105A700133	Resistor	R10,R11	Bellcore Issue 6	Level I		0.002399	2.00	.4451	0.004798	416842100.98
105A733003	Resistor	R2,R3	Bellcore Issue 6	Level I		0.002399	2.00	.4451	0.004798	416842100.98
1059700001	Resistor	FB2,FB3	Bellcore Issue 6	Level I		0.002399	2.00	.4451	0.004798	416842100.98
105A710053	Resistor	R13	Bellcore Issue 6	Level I		0.014394	1.00	1.3353	0.014394	69473683.50
1121701050	Capacitor	C39,C42	Bellcore Issue 6	Level I		0.004798	2.00	.8902	0.009596	208421050.49
1122701680	Capacitor	C16-C18,C22-C24	Bellcore Issue 6	Level I		0.004798	6.00	2.6706	0.028788	208421050.49
1124701650	Capacitor	C38,C41	Bellcore Issue 6	Level I		0.004798	2.00	.8902	0.009596	208421050.49
1129747650	Capacitor	C10,C11	Bellcore Issue 6	Level I		0.004798	2.00	.8902	0.009596	208421050.49
105A512403	Resistor	R6	Bellcore Issue 6	Level I		0.002399	1.00	.2225	0.002399	416842100.98
1124418080	Capacitor	C15,C21	Bellcore Issue 6	Level I		0.004798	2.00	.8902	0.009596	208421050.49
1121701680	Capacitor	C12-C14,C20,C9	Bellcore Issue 6	Level I		0.004798	5.00	2.2255	0.023990	208421050.49
105A700009	Resistor	R18-R25	Bellcore Issue 6	Level I		0.002399	8.00	1.7804	0.019192	416842100.98
1129701690	Capacitor	C35-C37,C40	Bellcore Issue 6	Level I		0.004798	4.00	1.7804	0.019192	208421050.49
1129710090	Capacitor	C43	Bellcore Issue 6	Level I		0.004798	1.00	.4451	0.004798	208421050.49
1129710390	Capacitor	C30,C32	Bellcore Issue 6	Level I		0.004798	2.00	.8902	0.009596	208421050.49
1129701790	Capacitor	C1-C8	Bellcore Issue 6	Level I		0.004798	8.00	3.5607	0.038384	208421050.49
1304101340	Semiconductor	D1,D2	Bellcore Issue 6	Level I		0.006341	2.00	1.1765	0.012682	157698431.00
105A702209	Resistor	R1	Bellcore Issue 6	Level I		0.002399	1.00	.2225	0.002399	416842100.98
105A554963	Resistor	R9	Bellcore Issue 6	Level I		0.002399	1.00	.2225	0.002399	416842100.98
1129610051	Capacitor	C25,C29,C31	Bellcore Issue 6	Level I		0.004798	3.00	1.3353	0.014394	208421050.49
14S6201030	Integrated Circuit	U2	Bellcore Issue 6	Level I	9.40	0.340313	1.00	31.5696	0.340313	2938474.96
1231325058	Miscellaneous	Y1	Bellcore Issue 6	Level I		0.150000	1.00	13.9150	0.150000	6666666.67
14S9351200	Integrated Circuit	U1	Bellcore Issue 6	Level I	15.30	0.107709	1.00	9.9918	0.107709	9284236.29
131411171C	Integrated Circuit	Q1	Bellcore Issue 6	Level I	16.00	0.217871	1.00	20.2111	0.217871	4589869.32