

MTBF REPORT

Applicant : Sure Star computer. CO., LTD
 Commodity : POWER SUPPLY
 Model : TC-xxxR2U Series
 Quantity : 1 set
 Date of Testing : Dec .10, 2009 ~ Dec.11, 2009
 Testing Item :

Referring to MIL-HDBK-217F, Notice2, APPENDIX A : PARTS
 COUNT RELIABILITY PREDICTION , predict the
 value of MTBF

Environmental factor (πE) : GB

TC-400R8P (Excluded:FAN): Failure rate=4.745851 (Failures/10⁶ hours)

Unit : Failures/10⁶ hours

No.	Part Type	λ_g	π_0	π_L	N	λ_{eq}
1	Capacitor (Aluminum Dry) , CE	0.0013	10	1.0	25	0.325
2	Capacitor (Ceramic, Gen. Purpose) , CK	0.0017	10	1.0	28	0.476
3	Metallized plastic/plasticn ,CH	0.00051	10	1.0	4	0.0204
4	Resistor (Film), RN	0.0037	10	1.0	62	2.294
5	Diode (General Purpose Analog)	0.0036	5.5	1.0	25	0.495
6	Diode (Voltage Reg. ; Zener)	0.0033	5.5	1.0	4	0.0726
7	Diode (Power Rectifier/Schottky Pwr.)	0.0028	5.5	1.0	6	0.0924
8	Diode (fast Recovery Pwr. Rectifier)	0.0230	5.5	1.0	3	0.3795
9	FUSES	0.01	1	1.0	1	0.01
10	Thermistor , RTH	0.0014	10	1.0	1	0.014
11	OPTO- Isolator	0.027	5.5	1.0	3	0.4455
12	Microcircuit (Bipolar technology, , Linear, 1-100 Transistors)	0.0095	10	1.0	1	0.095
13	Transistor (NPN/PNP, f < 200MHz)	0.00015	5.5	1.0	7	0.005775
14	Transistor (SIFET, f \leq 400MHz)	0.014	5.5	1.0	2	0.154
15	Inductive Device (Coil, Fixed Inductor	0.000032	3	1.0	7	0.000672
16	Transformer, Switching	0.00061	3	1.0	4	0.00732
17	Connector (Rectangular)	0.050	2	1.0	1	0.1
18	Plated Through Hole Circuit Boards	0.022	2	1.0	1	0.044
19	Switche	0.100	2	1.0	1	0.2
20	Single Connection (Hand Solder W/Wrapping)	0.00007	1	1.0	7	0.00049
21	OPTO- Emitter	0.00047	5.5	1.0	1	0.002585
22	Single Connection (Reflow Solder)	0.000065	1	1.0	456	0.02964
23	Single Connection (Clip Termination)	0.00012	1	1.0	2	0.00024
Total Failure rate (Failures/10 ⁶ hours)						5.264122

B+C card

Unit : Failures/10⁶ hours

No.	Part Type	λ_g	π_0	π_L	N	λ_{eq}
1	Resistor (Film), RN	0.0037	10	1.0	52	1.924
2	Diode (General Purpose Analog)	0.0036	5.5	1.0	6	0.1188
3	Single Connection (Reflow Solder)	0.000065	1	1.0	226	0.01469
4	Capacitor (Ceramic, Gen. Purpose) , CK	0.0017	10	1.0	27	0.459
5	Metallized plastic/plastic CH	0.00051	10	1.0	1	0.0051
6	Transistor (NPN/PNP, f < 200MHz)	0.00015	5.5	1.0	2	0.00165
7	Microcircuit (Bipolar technology, 1-100 Transistors)	0.0095	10	1.0	2	0.19
8	Plated Through Hole Circuit Boards	0.022	2	1.0	1	0.044
Total Failure rate (Failures/10 ⁶ hours)						2.75724

FAN card

Unit : Failures/10⁶ hours

No.	Part Type	λ_g	π_0	π_L	N	λ_{eq}
1	Resistor (Film), RN	0.0037	10	1.0	2	0.074
2	Microcircuit (Bipolar technology, , Linear, 1-100 Transistors)	0.0095	10	1.0	1	0.095
3	Transistor (NPN/PNP, f < 200MHz)	0.00015	5.5	1.0	4	0.0033
4	Connector (Rectangular)	0.050	2	1.0	2	0.2
5	Capacitor (Ceramic, Gen. Purpose) , CK	0.0017	10	1.0	1	0.017
6	Plated Through Hole Circuit Boards	0.022	2	1.0	1	0.044
7	Single Connection (Reflow Solder)	0.000065	1	1.0	50	0.00325
Total Failure rate (Failures/10 ⁶ hours)						0.43655

Failure rate= 8.457912

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