LAMBDA

MTBF Report

KMD40-xx

Referring to MIL-HDBK-217f, Notice 1,APPENDIX A : PARTS
COUNT RELIABLILITY PREDICTION ,PREDICT the MTBF.

Testing Conditions : According to applicant's specifications

Environmental factor (πE) : Ground Benign (Gb)
λg :Generic failure rate (failures/106 hours)
πQ :Quality factor ,πL :Learning factor, N :Quantity
λeq :Total failure rate (failures/106 hours)

No.	Part Type	λg	πQ	πL	N	λeq
1	Resistor (Film), RN	0.0014	10	--	16	0.224
2	Capacitor (Aluminum Dry),CE	0.029	10	--	6	1.74
3	Capacitor (Ceramic,Gen. Purpose),CK	0.0036	10	--	15	0.54
4	Capacitor (Metalized plastic/plastic)	0.0029	10	--	1	0.029
5	Trandient Suppresor/Varistor	0.0029	10	--	1	0.029
6	Thermistor	0.065	10	--	1	0.65
7	Diode (Fast Recovery Pwr. Rectifier)	0.065	5.5	--	2	0.715
8	Diode (General Purpose analog)	0.0036	5.5	--	1	0.0198
9	Diode (Power Rectifier/Schottky Pwr.)	0.0028	5.5	--	2	0.0308
10	Diode (Voltage Ref./Reg ; Avalanche	0.0033	5.5	--	6	0.1089
	and Zener)					
11	Transistor (NPN/PNP,f<200MHz)	0.00015	5.5	--	0	0
12	Transistor (Power ,f<200MHz)	0.0057	5.5	--	0	0
13	Diode (Thyristor/SCR)	0.0025	5.5	--	0	0
14	Microcircuit (Bipolar technology, Gate	0.0095	10	--	2	0.19
	/logic Arrays, Linear,1-100 Transistors					
15	Inductive Device	0.0035	10	--	4	0.14
	(Low power Pulse XFMR)					
16	Electronic Filter (Ceramic-Ferrite)	0.022	2.9	--	2	0.1276
17	FUSE	0.01	1	--	1	0.01
18	Rotating Device(Motor)	1.6	1	--	0	0
19	Switch (Toggle or Push-button)	0.001	20	--	0	0
20	Connector(General)	0.011	2	--	0	0
21	Hand Solder(Wrapping)	0.00014	1	--	2	0.00028
22	Single Connections (Clip Termination)	0.00012	1	--	0	0
23	Single Connections (Refow Solder)	0.000069	1	--	5	0.00035
Total Equipment Failure rate (Failures/10^6 hours)						4.55473
MTBF = 219552 HOURS 25°C						