

# RTC-700C

## Reliability Prediction Report

### (MTBF)

<b>Summary</b>	Failure Rate: 59.501848 ppm MTBF: 16,806 Hours
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Issue date	Approval	Test Engineer
2015/1/27	KJ Wang	Anderson Lin

# Reliability Prediction (MTBF)

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**I . Model Name:** RTC-700C

**II . Prediction Date:** Jan. 27, 2015

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

**IV . Predicted by:** Anderson Lin

**V . Equipment:** Windchill Quality Solutions 10.1

**VI. Simulation Environment:**

- Temperature: 30 degrees C
- Standard: Telcordia (Bellcore) Standard

**VII. Term and Definition:**

- Unit : An assembly of device.
- Duty Cycle : Used in 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 in specify that the failure rate is to be calculated based the selected Calculation models. The multiplier is 1,000,000,000.
- MTBF : MTBF is always specified in hours.

**VIII. Prediction Result:**

RTC-700C (9697700C04-D):

- Failure Rate: 59.501848 ppm

- MTBF: 16,806 Hours

**AAEON Reliability Prediction  
Summary**

**File Name:** RTC-700C.rfp  
**Duty Cycle:** 100  
**Calculation Model:** Telcordia Issue 1  
**Method:** Method I Case 3

**Failure Rate:** 59.501848  
**MTBF (hrs):** 16,806  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Assembly Name	Part Number	Ref Des	Quantity	Failure Rate	MTBF
System	System		1	59.501848	16,806

**File Name:** RTC-700C.rfp  
**Assembly:** System  
**Ref Des:**  
**Description:**

**Failure Rate:** 59.501848  
**MTBF (hrs):** 16,806  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
14408566.000000 000000000	Connection	CN1		0.012261	1	81557831.009572
1050500334.0000 00000000000	Connection	CN2		0.012261	1	81557831.009572
1050501054.0000 00000000000	Connection	CN3		0.012261	1	81557831.009572
1050501234.0000 00000000000	Connection	CN4		0.012261	1	81557831.009572
1050501334.0000 00000000000	Connection	CN6		0.012261	1	81557831.009572
1050502204.0000 00000000000	Connection	CN7		0.012261	1	81557831.009572
1050502734.0000 00000000000	Connection	CN10		0.012261	1	81557831.009572
1050504334.0000 00000000000	Connection	CN16		0.012261	1	81557831.009572
1050504734.0000 00000000000	Connection	CN17		0.012261	1	81557831.009572
1050505633.0000 00000000000	Connection	CN21		0.012261	1	81557831.009572
1050509124.0000 00000000000	Connection	CN24		0.012261	1	81557831.009572
1050510034.0000 00000000000	Connection	CN29		0.012261	1	81557831.009572
1050516014.0000 00000000000	Connection	CN30,CN31		0.012261	2	40778915.504786
1050520034.0000 00000000000	Connection	CN32,CN36,C N37, CN40,CN48,C N49		0.012261	6	13592971.834929
1050522034.0000 00000000000	Connection	CN34		0.012261	1	81557831.009572
1050524004.0000 00000000000	Connection	CN35		0.012261	1	81557831.009572
1050524324.0000 00000000000	Connection	CN38		0.012261	1	81557831.009572
1050524924.0000 00000000000	Connection	CN41		0.012261	1	81557831.009572
1050533034.0000 00000000000	Connection	CN47		0.012261	1	81557831.009572

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1050534864.0000 00000000000	Capacitor	C115,C117,C121, C122,C126,C128, C129,C131,C142, C144,C145,C15,C18, C183,C19,C197,C20, C201,C210,C214, C218,C220,C226, C228,C240,C242, C244,C246,C249, C251,C253,C264, C265,C298,C303, C314,C318,C351, C381,C395,C396, C397,C398,C399, C400,C401,C404, C405,C407		0.001881	168	3163899.504663
1050560424.0000 00000000000	Capacitor	C16,C17,C328,C329, C522,C523,C626, C627		0.001881	8	66441889.597922

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1050568034.0000 00000000000	Capacitor	C100,C101,C102, C103,C104,C105, C106,C107,C108, C109,C110,C111, C112,C113,C21,C22, C23,C24,C25,C26, C27,C28,C29,C30, C31,C32,C33,C34, C35,C36,C37,C38, C39,C40,C41,C42, C43,C44,C45,C46, C47,C48,C49,C50, C51,C52,C53,C54, C55,C56,C57,C58, C59,C60,C61,C62, C6		0.001881	91	5841045.239378
1050582034.0000 00000000000	Capacitor	C114,C118,C119, C120,C123,C124, C143,C146,C157, C231,C232,C233, C234,C241,C245, C250,C337,C345, C346,C348,C349, C350,C874		0.001881	23	23110222.468842

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1050701504.0000 00000000000	Capacitor	C116,C125,C 127, C130,C140,C 182, C185,C196,C 204, C205,C209,C 212, C213,C215,C 217, C219,C222,C 225, C227,C257,C 260, C302,C306,C 402, C403,C406,C 415, C417,C420,C 422, C463,C473,C 478, C481,C483,C 484, C485,C486,C 494, C496,C502,C 506, C507,C508,C 510, C511,C512,C 513,		0.001881	79	6728292.617511
1051500172.0000 00000000000	Capacitor	C132,C313,C 316, C409,C410		0.001881	5	106307023.356675
1059501261.0000 00000000000	Capacitor	C133,C134,C 135, C136,C137,C 138, C139,C141,C 310, C315,C341,C 344, C347		0.001881	13	40887316.675644
1059700001.0000 00000000000	Capacitor	C184,C334,C 340, C379,C790,C 800, C845		0.001881	7	75933588.111911



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1121501691.0000 00000000000	Capacitor	C194,C195,C 238, C301,C304,C 322, C325,C326,C 412, C413,C427,C 428, C429,C432,C 449, C455,C465,C 472, C475,C477,C 528, C529,C530,C 532, C533,C534,C 538, C540,C541,C 542, C550,C551,C 559, C563,C568,C 585, C587,C590,C 601, C603,C628,C 629, C630,C631,C 634, C639,C641,C 642,		0.001881	91	5841045.239378

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1124410191.0000 00000000000	Capacitor	C198,C206,C208, C221,C223,C239, C243,C252,C254, C278,C299,C300, C317,C411,C464, C480,C500,C564, C566,C567,C602, C635,C636,C640, C645,C647,C653, C664,C667,C755, C764,C810,C818, C843,C875		0.001881	35	15186717.622382
1124418090.0000 00000000000	Capacitor	C199,C200,C211, C319,C544,C569, C638,C665,C786		0.001881	9	59059457.420375
1124418190.0000 00000000000	Capacitor	C207		0.001881	1	531535116.783376

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1124522680.0000 00000000000	Capacitor	C216,C224,C 235, C236,C237,C 444, C445,C450,C 451, C456,C466,C 467, C468,C470,C 474, C476,C479,C 482, C487,C489,C 490, C492,C493,C 495, C497,C498,C 499, C501,C504,C 505, C509,C759,C 876, C879,C882,C 885, C888		0.001881	37	14365813.967118
1124533191.0000 00000000000	Capacitor	C247,C305,C 382, C384,C391,C 393, C793,C794,C 795, C796,C797,C 798, C799,C836,C 837, C838,C839,C 840, C841,C863		0.001881	20	26576755.839169
1129522790.0000 00000000000	Capacitor	C256,C258,C 259, C261,C262,C 266, C267,C268,C 269		0.001881	9	59059457.420375
1129622690.0000 00000000000	Capacitor	C272,C273		0.001881	2	265767558.391688
1129701791.0000 00000000000	Capacitor	C321,C552,C 553		0.001881	3	177178372.261125
1129710090.0000 00000000000	Capacitor	C333,C335,C 338, C747		0.001881	4	132883779.195844
1129715090.0000 00000000000	Capacitor	C336		0.001881	1	531535116.783376

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1129747091.0000 00000000000	Capacitor	C342,C545,C 760, C859,C871		0.001881	5	106307023.356675
1189615154.0000 00000000000	Capacitor	C343,C352,C 592, C593,C596,C 597, C734,C735,C 736		0.001881	9	59059457.420375
1211100119.0000 00000000000	Capacitor	C380,C394		0.001881	2	265767558.391688
1211100560.0000 00000000000	Capacitor	C385,C388		0.001881	2	265767558.391688
1211122074.0000 00000000000	Capacitor	C386,C389		0.001881	2	265767558.391688
1211133078.0000 00000000000	Capacitor	C387,C390		0.001881	2	265767558.391688
1211147076.0000 00000000000	Capacitor	C414,C419		0.001881	2	265767558.391688
1211147078.0000 00000000000	Capacitor	C441,C442,C 443, C446,C447,C 448, C452,C453,C 454, C457,C458,C 459, C460,C461,C 462, C469,C471,C 488, C491,C554,C 599, C842,C846,C 869		0.001881	24	22147296.532641
1211204760.0000 00000000000	Capacitor	C525,C526,C 527, C536,C546,C 547, C548,C549,C 586, C588,C632		0.001881	11	48321374.253034
1211206860.0000 00000000000	Capacitor	C531,C589,C 633, C852,C860,C 867, C894		0.001881	7	75933588.111911
1212306030.0000 00000000000	Capacitor	C535,C787,C 834, C835,C849		0.001881	5	106307023.356675
1214101800.0000 00000000000	Capacitor	C543		0.001881	1	531535116.783376

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1214609000.0000 00000000000	Capacitor	C555		0.001881	1	531535116.783376
1231271240.0000 00000000000	Capacitor	C607,C608		0.001881	2	265767558.391688
1231324056.0000 00000000000	Capacitor	C625,C861		0.001881	2	265767558.391688
1231332726.0000 00000000000	Capacitor	C637		0.001881	1	531535116.783376
1231384040.0000 00000000000	Capacitor	C731,C732,C 733, C737,C767,C 851, C864,C866		0.001881	8	66441889.597922
1300414848.0000 00000000000	Capacitor	C771,C772		0.001881	2	265767558.391688
1301005450.0000 00000000000	Capacitor	C848		0.001881	1	531535116.783376
1301053040.0000 00000000000	Capacitor	C853,C854,C 855, C856,C857,C 858		0.001881	6	88589186.130563
1301793040.0000 00000000000	Capacitor	C868		0.001881	1	531535116.783376
1304101440.0000 00000000000	Capacitor	C883,C884		0.001881	2	265767558.391688
1305080040.0000 00000000000	Semiconductor	D20,D58,D59 ,D6		0.009169	4	27266624.498839
1305401200.0000 00000000000	Semiconductor	D18		0.009169	1	109066497.995355
1315020020.0000 00000000000	Semiconductor	D19,D21		0.009169	2	54533248.997677
1315230511.0000 00000000000	Semiconductor	D22,D55,D56		0.009169	3	36355499.331785
1315443512.0000 00000000000	Semiconductor	D24,D52,D53 ,D60, D61,D62,D63 ,D64, D65,D66,D70 ,D71		0.009169	12	9088874.832946
1315720010.0000 00000000000	Semiconductor	D26,D27,D28 ,D29, D30,D31,D32 ,D33, D34,D57		0.009169	10	10906649.799535
1315806510.0000 00000000000	Semiconductor	D67		0.009169	1	109066497.995355
1430035210.0000 00000000000	Inductor	FB3		0.000832	1	1201395147.99046 3

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1430035540.0000 00000000000	Inductor	FB24,FB29,F B30, FB33,FB39,F B4,FB40, FB5,FB7,FB8		0.000832	10	120139514.799046
1430050720.0000 00000000000	Inductor	FB13,FB6		0.000832	2	600697573.995232
1430651500.0000 00000000000	Inductor	FB10,FB11,F B12, FB18,FB21,F B22, FB25,FB26,F B27, FB28,FB34,F B35, FB36,FB37,F B9		0.000832	15	80093009.866031
1430686102.0000 00000000000	Inductor	FB19,FB20		0.000832	2	600697573.995232
1440001280.0000 00000000000	Inductor	FB31,FB32		0.000832	2	600697573.995232
1440056420.0000 00000000000	Optical Device	LED3		0.050970	1	19619419.997789
1440095750.0000 00000000000	Inductor	L1,L8		0.000832	2	600697573.995232
1440475110.0000 00000000000	Inductor	L3		0.000832	1	1201395147.99046 3
1443587640.0000 00000000000	Inductor	L5		0.000832	1	1201395147.99046 3
1540500040.0000 00000000000	Inductor	L11,L12		0.000832	2	600697573.995232
1601030700.0000 00000000000	Inductor	L13		0.000832	1	1201395147.99046 3
1651508010.0000 00000000000	Inductor	L15,L16		0.000832	2	600697573.995232
1652503108.0000 00000000000	Inductor	L18,L19,L20, L21, L23,L24,L25, L26		0.000832	8	150174393.498808
1652505211.0000 00000000000	Inductor	L22,L27,L28		0.000832	3	400465049.330154
1653103221.0000 00000000000	Inductor	L33		0.000832	1	1201395147.99046 3
1654003021.0000 00000000000	Inductor	L34		0.000832	1	1201395147.99046 3

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
1654401930.0000 00000000000	Semiconductor	Q1,Q10,Q100,Q101,Q102,Q103,Q105,Q106,Q107,Q115,Q117,Q118,Q119,Q120,Q121,Q122,Q125,Q126,Q127,Q138,Q139,Q14,Q142,Q143,Q146,Q147,Q149,Q15,Q150,Q152,Q16,Q18,Q19,Q2,Q21,Q22,Q23,Q24,Q28,Q29,Q32,Q36,Q4,Q41,Q46,Q48,Q5,Q52,Q53,Q55,Q56,Q57,Q59,Q6,Q60,		0.009169	72	1514812.472158
1654805302.0000 00000000000	Semiconductor	Q114,Q116,Q124,Q129,Q27,Q31,Q35,Q39,Q50,Q75,Q77,Q87,Q89,Q91		0.009169	14	7790464.142525
1654900834.0000 00000000000	Semiconductor	Q54,Q84,U60		0.009169	3	36355499.331785
1654902433.0000 00000000000	Semiconductor	Q128		0.009169	1	109066497.995355
1654902530.0000 00000000000	Semiconductor	Q62		0.009169	1	109066497.995355
1654903600.0000 00000000000	Semiconductor	Q93,Q94,Q98		0.009169	3	36355499.331785
1654910201.0000 00000000000	Semiconductor	Q108,Q109,Q110,Q111,Q123,Q131,Q132,Q133,Q134,Q140,Q141		0.009169	11	9915136.181396

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1654910304.0000 00000000000	Resistor	RN1,RN2,RN3,RN4		0.006517	4	38359568.556413
1654930200.0000 00000000000	Resistor	RN10,RN11		0.006517	2	76719137.112826
1654939300.0000 00000000000	Resistor	RN15,RN16,RN17,RN18,RN19,RN20,RN21,RN22,RN23,RN24,RN25,RN26,RN27,RN28,RN29,RN30,RN32,RN35,RN38,RN39,RN40,RN41,RN43,RN46		0.006517	24	6393261.426069
1655902121.0000 00000000000	Resistor	R1,R4		0.000832	2	600697573.995232
1655902130.0000 00000000000	Resistor	R1000,R1001,R1009,R101,R1012,R1019,R102,R1031,R1034,R1035,R104,R105,R1055,R1070,R1071,R1073,R1074,R1079,R1096,R1097,R111,R1113,R1123,R1126,R1127,R1130,R1135,R1136,R1174,R1175,R1178,R1179,R1186,R1194,R1197,R1198,R1213,R1214,R1215,R1217,R1247,R		0.000832	244	4923750.606518
1655908123.0000 00000000000	Resistor	R5		0.000832	1	1201395147.990463



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1655910130.0000 00000000000	Resistor	R1010,R1032 ,R1150, R1158,R1160 ,R19, R20,R246,R4 73,R556, R585,R586,R 587,R6, R629,R637,R 639, R730,R734,R 735, R844,R845,R 903, R957,R990		0.000832	25	48055805.919619
1750019910.0000 00000000000	Resistor	R1014,R1015 ,R1017, R1018,R1029 ,R1030, R1033,R1037 ,R1038, R1052,R1056 ,R1075, R1077,R1080 ,R1093, R1101,R1104 ,R1106, R1161,R1162 ,R1163, R1164,R1165 ,R1166, R1173,R1177 ,R1181, R1187,R119, R1192, R1196,R120, R1205, R1216,R1219 ,R127, R1288,R160, R161, R277,R295,R 29		0.000832	115	10446914.330352

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1759900014.0000 00000000000	Resistor	R1060,R1061 ,R1062, R1063,R1064 ,R1065, R1066,R1067 ,R1099, R11,R1252,R 16,R27, R28,R40,R41 ,R42, R531,R56,R7 37,R772, R848		0.000832	22	54608870.363203
	Resistor	R1008,R1053 ,R1054, R1082,R1083 ,R1085, R1086,R1087 ,R1088, R1089,R1090 ,R1107, R1110,R1111 ,R1115, R1116,R1119 ,R1124, R1125,R1152 ,R1180, R1193,R1224 ,R130, R15,R18,R21 4,R216, R217,R218,R 219, R220,R251,R 252, R272,R296,R 331, R382,R477,R 502, R503,R561,R 58,R605, R		0.000832	75	16018601.973206

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Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Resistor	R1020,R1021 ,R1022, R1023,R1024 ,R1025, R1027,R1028 ,R1039, R1040,R1041 ,R1042, R1043,R1051 ,R1069, R1076,R1184 ,R1191, R1200,R38,R 452, R582,R594,R 680, R707,R714,R 715, R837,R840,R 882, R886		0.000832	31	38754682.193241
	Resistor	R100,R1058, R1081, R1091,R1092 ,R1100, R1131,R1144 ,R1145, R1146,R1147 ,R1148, R1149,R1153 ,R1222, R1236,R1237 ,R1240, R1243,R125, R129, R137,R172,R 173, R232,R242,R 243, R244,R303,R 304, R312,R327,R 333, R334,R335,R 336, R352,R357,R 358, R381,R451,R 50,R552, R554,R555		0.000832	73	16457467.780691
	Resistor	R55		0.000832	1	1201395147.99046 3

**Reliability Prediction  
Summary**

**File Name:** RTC-700C.rfp  
**Assembly:** System  
**Ref Des:**  
**Description:**

**Failure Rate:** 59.501848  
**MTBF (hrs):** 16,806  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Resistor	R1171,R551, R589, R591,R610,R 73,R75, R921		0.000832	8	150174393.498808
	Resistor	R74		0.000832	1	1201395147.99046 3
	Resistor	R76,R77		0.000832	2	600697573.995232
	Resistor	R78		0.000832	1	1201395147.99046 3
	Resistor	R79		0.000832	1	1201395147.99046 3
	Resistor	R723,R777,R 778, R779,R780,R 781, R782,R783,R 784, R786,R788,R 789, R792,R793,R 795, R800,R801,R 812,R84, R85		0.000832	20	60069757.399523
	Resistor	R1102,R703, R704, R87		0.000832	4	300348786.997616
	Resistor	R106,R107,R 108, R109,R110,R 112, R113,R1137, R1138, R114,R115,R 1167, R1168,R1169 ,R1170, R141,R142,R 143, R144,R145,R 147, R148,R149,R 150, R362,R363		0.000832	26	46207505.691941
	Resistor	R1094,R1095 ,R116, R151,R152,R 192, R196,R877,R 878		0.000832	9	133488349.776718
	Resistor	R158,R164,R 165, R299		0.000832	4	300348786.997616

**File Name:** RTC-700C.rfp  
**Assembly:** System  
**Ref Des:**  
**Description:**

**Failure Rate:** 59.501848  
**MTBF (hrs):** 16,806  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Resistor	R1011,R1122 ,R1151, R1159,R1185 ,R210, R260,R261,R 318, R474,R483,R 484, R725,R841,R 951		0.000832	15	80093009.866031
	Resistor	R1139,R1255 ,R225, R248,R249,R 681, R695,R727,R 953, R987		0.000832	10	120139514.799046
	Resistor	R1084,R1202 ,R1206, R1218,R239, R257, R258,R643,R 644, R649,R697,R 710, R718,R724,R 787, R796,R797,R 799, R810,R813,R 836, R839		0.000832	22	54608870.363203
	Resistor	R1223,R1254 ,R1276, R1286,R1287 ,R270, R290,R683,R 726, R952,R989		0.000832	11	109217740.726406
	Resistor	R1204,R1208 ,R291, R292,R716,R 722		0.000832	6	200232524.665077
	Resistor	R294,R732,R 733		0.000832	3	400465049.330154
	Resistor	R300,R301,R 350		0.000832	3	400465049.330154
	Resistor	R360,R361		0.000832	2	600697573.995232
	Resistor	R383		0.000832	1	1201395147.99046 3
	Resistor	R460		0.000832	1	1201395147.99046 3
	Resistor	R553		0.000832	1	1201395147.99046 3

**File Name:** RTC-700C.rfp  
**Assembly:** System  
**Ref Des:**  
**Description:**

**Failure Rate:** 59.501848  
**MTBF (hrs):** 16,806  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Resistor	R588,R590,R593		0.000832	3	400465049.330154
	Resistor	R598		0.000832	1	1201395147.990463
	Resistor	R1281,R1282,R653,R654,R655,R693,R694		0.000832	7	171627878.284352
	Resistor	R660,R661,R663		0.000832	3	400465049.330154
	Resistor	R678		0.000832	1	1201395147.990463
	Resistor	R679,R686		0.000832	2	600697573.995232
	Resistor	R684		0.000832	1	1201395147.990463
	Resistor	R687		0.000832	1	1201395147.990463
	Resistor	R1225,R1229,R1235,R688,R690,R691		0.000832	6	200232524.665077
	Resistor	R700		0.000832	1	1201395147.990463
	Resistor	R701		0.000832	1	1201395147.990463
	Resistor	R1220,R705,R706,R720,R843		0.000832	5	240279029.598093
	Resistor	R719		0.000832	1	1201395147.990463
	Resistor	R1203,R1207,R1221,R721		0.000832	4	300348786.997616
	Resistor	R767,R830		0.000832	2	600697573.995232
	Resistor	R776		0.000832	1	1201395147.990463
	Resistor	R802,R804		0.000832	2	600697573.995232
	Resistor	R819		0.000832	1	1201395147.990463
	Resistor	R827		0.000832	1	1201395147.990463
	Resistor	R1188,R1189,R1190,R860,R861,R862		0.000832	6	200232524.665077
	Resistor	R901		0.000832	1	1201395147.990463

**Reliability Prediction  
Summary**

**File Name:** RTC-700C.rfp  
**Assembly:** System  
**Ref Des:**  
**Description:**

**Failure Rate:** 59.501848  
**MTBF (hrs):** 16,806  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Resistor	R911,R912,R913, R914,R915,R916, R917,R918		0.000832	8	150174393.498808
	Resistor	R1105		0.000832	1	1201395147.990463
	Resistor	R1226		0.000832	1	1201395147.990463
	Resistor	R1227		0.000832	1	1201395147.990463
	Resistor	R1228		0.000832	1	1201395147.990463
	Resistor	R1230		0.000832	1	1201395147.990463
	Resistor	R1231,R1277		0.000832	2	600697573.995232
	Resistor	R1232		0.000832	1	1201395147.990463
	Resistor	R1233		0.000832	1	1201395147.990463
	Resistor	R1234		0.000832	1	1201395147.990463
	Resistor	R1238		0.000832	1	1201395147.990463
	Resistor	R1246		0.000832	1	1201395147.990463
	Resistor	R1280,R1283		0.000832	2	600697573.995232
	Connection	SW2,SW3		0.012261	2	40778915.504786
	Integrated Circuit	U1		0.042271	1	23656842.333166
	Integrated Circuit	U2		0.085069	1	11755142.304947
	Integrated Circuit	U3		0.085069	1	11755142.304947
	Integrated Circuit	U4		0.085069	1	11755142.304947
	Integrated Circuit	U5,U6		0.085069	2	5877571.152473
	Integrated Circuit	U10,U26,U7, U9		0.085069	4	2938785.576237
	Integrated Circuit	U16,U8		0.085069	2	5877571.152473
	Integrated Circuit	U11,U12,U13		0.085069	3	3918380.768316
	Integrated Circuit	U14,U25		0.085069	2	5877571.152473
	Integrated Circuit	U19		0.085069	1	11755142.304947
	Integrated Circuit	U103,U108,U109, U110,U111,U27,U28		0.085069	7	1679306.043564
	Integrated Circuit	U29		0.085069	1	11755142.304947
	Integrated Circuit	U30		0.085069	1	11755142.304947
	Integrated Circuit	U31		0.085069	1	11755142.304947
	Integrated Circuit	U40		0.085069	1	11755142.304947
	Integrated Circuit	U41,U43		0.085069	2	5877571.152473

**Reliability Prediction  
Summary**

**File Name:** RTC-700C.rfp  
**Assembly:** System  
**Ref Des:**  
**Description:**

**Failure Rate:** 59.501848  
**MTBF (hrs):** 16,806  
**Temperature:** 30  
**Environment:** GF, GU - Ground Fixed, Uncontrolled

Part Number	Category	Ref Des	Tem.Rise	Unit Failure Rate	Quantity	MTBF,Unit
	Integrated Circuit	U42		0.085069	1	11755142.304947
	Integrated Circuit	U46		0.085069	1	11755142.304947
	Integrated Circuit	U50		0.085069	1	11755142.304947
	Integrated Circuit	U51		0.085069	1	11755142.304947
	Integrated Circuit	U53,U55		0.085069	2	5877571.152473
	Integrated Circuit	U59		0.085069	1	11755142.304947
	Integrated Circuit	U63		0.085069	1	11755142.304947
	Integrated Circuit	U104,U105,U107,U66,U67		0.085069	5	2351028.460989
	Integrated Circuit	U72		0.085069	1	11755142.304947
	Integrated Circuit	U73		0.085069	1	11755142.304947
	Integrated Circuit	U75		0.085069	1	11755142.304947
	Integrated Circuit	U82		0.085069	1	11755142.304947
	Integrated Circuit	U91		0.085069	1	11755142.304947
	Integrated Circuit	U95		0.085069	1	11755142.304947
	Integrated Circuit	U98		0.085069	1	11755142.304947
	Integrated Circuit	U99		0.085069	1	11755142.304947
	Integrated Circuit	U100		0.085069	1	11755142.304947
	Integrated Circuit	U101		0.085069	1	11755142.304947
	Integrated Circuit	U106		0.085069	1	11755142.304947
	Integrated Circuit	U112		0.085069	1	11755142.304947
	Integrated Circuit	U113		0.085069	1	11755142.304947
	Miscellaneous	Y1		0.050000	1	20000000.000000
	Miscellaneous	Y2,Y5		0.050000	2	10000000.000000
	Miscellaneous	Y3		0.050000	1	20000000.000000
	Miscellaneous	Y4		0.050000	1	20000000.000000
	Miscellaneous	Y6		0.050000	1	20000000.000000
	Miscellaneous	Y8		0.050000	1	20000000.000000
	Integrated Circuit	U15		0.028401	1	35209593.221276
	Semiconductor	Q61		0.009169	1	109066497.995355
	Integrated Circuit	U84,U85		0.085069	2	5877571.152473
	Connection	CN11		0.012261	1	81557831.009572
	Connection	CN19		0.012261	1	81557831.009572
	Connection	CN11B		0.012261	1	81557831.009572
	Miscellaneous	CN35B		0.200000	1	5000000.000000
	Connection	SW1		0.012261	1	81557831.009572
		LN070ICGLO		50.000000	1	20000.000000