## *MTBF Report Summary*

**File Name** : GT-2065P333.3-F.RPJ
**Calculation Model** : Bellcore Issue 6 Method I Case 1
**Environment** : GB,GC -Ground Benign, Controlled
**Temperature** : 40.00

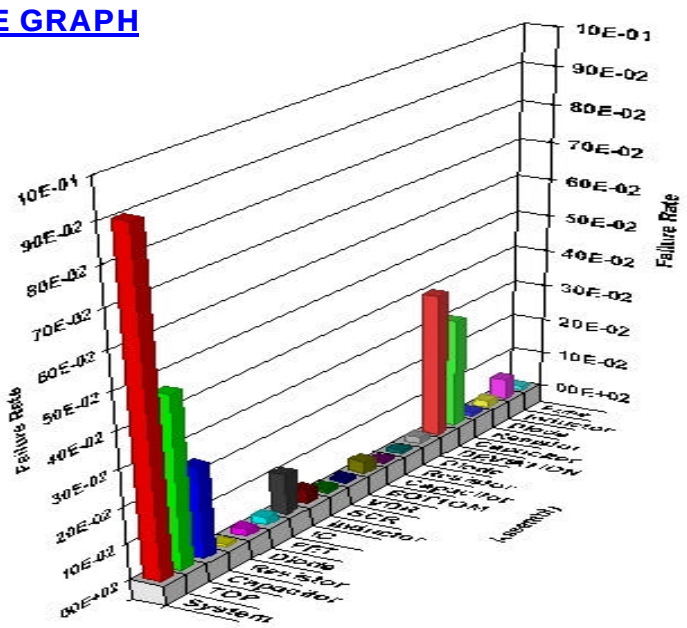
**Description** : Top-level assembly

**Part Number** : GT-2065P333.3-F rev.1
**Date** : September 6, 2004
**Time** : 3:40 PM

**Failure Rate** : 0.902006
**MTBF** : 1,108,640

| Assembly Name | Part Number | Ref Des | Qty | Failure Rate | MTBF |
|---|---|---|---|---|---|
| System | System | | 0 | 0.902006 | 1,108,640 |
| TOP | | | 0 | 0.468506 | 2,134,445 |
| Capacitor | | | 14 | 0.252000 | 3,968,254 |
| Resistor | | | 2 | 0.006000 | 166,666,667 |
| Diode | | | 3 | 0.018000 | 55,555,556 |
| FET | | | 1 | 0.020000 | 50,000,000 |
| IC | | | 4 | 0.112506 | 8,888,433 |
| Inductor | | | 2 | 0.038000 | 26,315,789 |
| SCR | | | 1 | 0.012000 | 83,333,333 |
| VDR | | | 1 | 0.010000 | 100,000,000 |
| BOTTOM | | | 0 | 0.033000 | 30,303,030 |
| Capacitor | | | 7 | 0.007000 | 142,857,143 |
| Resistor | | | 16 | 0.008000 | 125,000,000 |
| Diode | | | 3 | 0.018000 | 55,555,556 |
| DEVIATION | | | 0 | 0.400500 | 2,496,879 |
| Capacitor | | | 8 | 0.304000 | 3,289,474 |
| Resistor | | | 18 | 0.011500 | 86,956,522 |
| Diode | | | 3 | 0.018000 | 55,555,556 |
| Inductor | | | 3 | 0.057000 | 17,543,860 |
| Fuse | | | 2 | 0.010000 | 100,000,000 |

## FAILURE RATE GRAPH



## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Capacitor

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| C1 | AL 150uF 400V 105C 18f40mm KMG with 3 layers Tape | 1 | Qual:Level II | Lambda G: 75.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.075000 | 0.075000 |
| C11 | CER 222pf1Kv 6f5mm±20% | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C14 | CER 1nF 100v +/- 20% | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C3 | AL 120uF 25V 105C 6f15mm | 1 | Qual:Level II | Lambda G: 75.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.075000 | 0.075000 |
| CX1 | 154pF 275V X2 MKP | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CX2 | 154pF 275V X2 MKP | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CY1 | 102pF 250V Y2 AC# | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CY2 | 102pF 250V Y2 AC# | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CY3 | 102PF 250V Y1 KX | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CY4 | 472PF 250V Y1 KX | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CY5 | 102PF 250V Y1 KX | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CY6 | 102PF 250V Y1 KX | 1 | Qual:Level I | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CY7 | 470pF 250V Y2 CS | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |
| CY8 | 470pF 250V Y2 CS | 1 | Qual:Level II | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Resistor

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| R3 | RES M0F 47KW 1/2W 5% | 1 | Qual:Level II | Lambda G: 3.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.003000 | 0.003000 |
| R4 | RES M0F 47KO 2W ±5% WITH HEAT SHRINK TUBING | 1 | Qual:Level II | Lambda G: 3.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.003000 | 0.003000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Diode

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| D1 | DIODE UF4006G 1A/800V DO-41 | 1 | Qual:Level II, Type:General Purpose, Si, Type:Hermetic | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |
| D2 | DIODE FR103 1A/200V DO-41 | 1 | Qual:Level II, Type:General Purpose, Si, Type:Hermetic | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |
| LED1 | 3MM GRN W/ TUBING BOTH PINS 7MM LONG | 1 | Qual:Level II, Type:General Purpose, Si, Type:Hermetic | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** FET

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| Q1 | MOSFET STP20NM60FP 20A 650V TO-220FP | 1 | Qual:Level II, Appl:Switching, Type:Hermetic | Lambda G: 20.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.020000 | 0.020000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** IC

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| U1 | UC3842BN DIP-8 | 1 | Qual:Level II, Type:Hermetic | Lambda G: 28.126441, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.028126 | 0.028126 |
| U2 | LTV817C DIP-4 LITEON | 1 | Qual:Level II, Type:Hermetic | Lambda G: 28.126441, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.028126 | 0.028126 |
| U3 | TL431ACLP TO-92 | 1 | Qual:Level II, Type:Hermetic | Lambda G: 28.126441, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.028126 | 0.028126 |
| U4 | LTV817C DIP-4 LITEON | 1 | Qual:Level II, Type:Hermetic | Lambda G: 28.126441, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.028126 | 0.028126 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Inductor

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| LF1 | COMMON MODE CHOKE 17mH | 1 | Qual:Level II, Type:Power Filter | Lambda G: 19.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.019000 | 0.019000 |
| LF2 | COMMON MODE CHOKE | 1 | Qual:Level II, Type:Power Filter | Lambda G: 19.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.019000 | 0.019000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** SCR

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| SCR1 | CR02AM -8 TO92 MITSUBISHI | 1 | Qual:Level II, Type:Hermetic | Lambda G: 12.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.012000 | 0.012000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** VDR

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| VDR1 | | 1 | Qual:Level II, Type:Varistor, Type:Hermetic | Lambda G: 10.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.010000 | 0.010000 |

## *MTBF Report Details*

**File Name** 2nd.RPJ
**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Capacitor

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| C4 | CAP 10000PF 50V 10% CERAMIC X7R 0805 | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C5 | CAP 150PF 50V 10% CERM CHIP 0805 SMD | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C6 | CAP 1000PF 50V 5% NPO 0805 | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C7 | CAP 1.0UF 16V 10% CERAMIC X7R 1206 | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C9 | CAP 0.1UF 50V 10% CERAMIC X7R 0805 | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C105 | CAP 0.1UF 50V 10% CERAMIC X7R 1206 | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C106 | CAP 0.1UF 50V 10% CERAMIC X7R 1206 | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 45.00

**Assembly/Type** Resistor

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| R1 | RES 1MO 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R100 | RES 10O 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R11 | RES 1.5M OHM 1/4W 5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R110 | RES 3.09KO 1/4W ±1% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R112 | RES 1KO 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R12 | RES 10KO 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R13 | RES 15KO 1/4W ±1% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R14 | RES 7.5K OHM 1/4W 5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R15 | RES 1KO 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R17 | RES 27O 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R18 | RES 10KO 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R2 | RES 1MO 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R5 | RES 27K 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R6 | RES 27K 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R7 | RES 27K 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R8 | RES 27K 1/4W ±5% 1206 SMD | 1 | Qual:Level II | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 45.00

**Assembly/Type** Diode

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| D4 | 1N4148 Signal Diodes Mini Melf Package SOD-80 (LL4148) | 1 | Qual:Level II, Type:General Purpose, Si, Type:Hermetic | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |
| D5 | 1N4148 Signal Diodes Mini Melf Package SOD-80 (LL4148) | 1 | Qual:Level II | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |
| D6 | 1N4148 Signal Diodes Mini Melf Package SOD-80 (LL4148) | 1 | Qual:Level II | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Capacitor

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| C101 | 2200UF 6.3V GE SERIES | 1 | Qual:Level II | Lambda G: 75.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.075000 | 0.075000 |
| C102 | 2200UF 6.3V GE SERIES | 1 | Qual:Level II | Lambda G: 75.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.075000 | 0.075000 |
| C103 | 2200UF 6.3V GE SERIES | 1 | Qual:Level II | Lambda G: 75.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.075000 | 0.075000 |
| C104 | 2200UF 6.3V GE SERIES | 1 | Qual:Level II | Lambda G: 75.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.075000 | 0.075000 |
| C107 | 0.47UF 50V +/-10% CERAMIC CAPACITOR | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C108 | CAP 0.1UF 50V CERAMIC X7R 1206 | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C13 | 330PF NPO SMD 0805 | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |
| C2 | CER 222pf 1Kv 6f5mm Z5U | 1 | Qual:Level II | Lambda G: 1.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.001000 | 0.001000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 45.00

**Assembly/Type** Resistor

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| R10 | 150K 1/4W 5% SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R103 | 24R 1W 5% SMD 2512 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R104 | 27R 1/4W 5% 1206 SMD | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R105 | 51R 1/4W 5% SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R106 | 100R 1/4W 5% SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R107 | 510R 1% 1/4W SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R108 | 6.2R 1% 1/4W SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R109 | 1.0K 1/4W 1% SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R111 | 6.2R 1% 1/4W SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R113 | 51R 1/4W 5% SMD 0805 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R114 | 220R 1/4W 5% SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R115 | 24R 1W 5% SMD 2512 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R116 | 24R 1W 5% SMD 2512 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R16 | 680R 1/4W 1% 1206 SMD | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R19 | 0.75 ohm Wire Wound Type 1% 3W w/ 10mm Teflon tube at both leads | 1 | | Lambda G: 3.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.003000 | 0.003000 |
| R20 | 33R 1/2W 5% CARBON TYPE | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R21 | 3.9R 1W 1% SMD 2512 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |
| R9 | 340K 1/4W 5% SMD 1206 | 1 | | Lambda G: 0.500000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.000500 | 0.000500 |

## *MTBF Report Details*

**Calculation Mode l** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Diode

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| D101 | 40CPQ060 60V 40A SCHOTTKY DIODE TO-247 | 1 | Qual:Level II | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |
| ZD100 | ZMM3.9 3.9V | 1 | Qual:Level II | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |
| ZD101 | 0R 1/4W 5% SMD 1206 | 1 | Qual:Level II | Lambda G: 6.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.006000 | 0.006000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Inductor

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| L1 | TEN WELL PN: 883973 REV.B | 1 | Qual:Level II, Type:Power Filter | Lambda G: 19.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.019000 | 0.019000 |
| L100 | Globtek PN: 403-0018 Rev B | 1 | Qual:Level II, Type:Power Filter | Lambda G: 19.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.019000 | 0.019000 |
| T1 | GTM2065P333.3 REV D | 1 | Qual:Level II, Type:Power, Filter Choke | Lambda G: 19.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.019000 | 0.019000 |

## *MTBF Report Details*

**Calculation Model** Bellcore Issue 6 Method I Case 1
**Environment** GB, GC - Ground Benign, Controlled
**Temperature** 40.00

**Assembly/Type** Fuse

| Ckt Code | Description | Qty | Specific Data | Pi Factors | Failure Rat |
|---|---|---|---|---|---|
| F1 | T 2A 250V MRT | 1 | Qual:Level II, Type:<= 30A | Lambda G: 5.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.005000 | 0.005000 |
| F2 | T 2A 250V MRT | 1 | Qual:Level II, Type:<= 30A | Lambda G: 5.000000, Pi E: 1.000000, Pi FY: 4.000000, Pi Q: 1.000000, Pi S: 1.000000, Pi T: 1.000000, Model Failure Rate: 0.005000 | 0.005000 |