



Test Report: HLP-80H-24

80W Single Output Switching Power Supply

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Control Function Test

Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test

E.M.C. Test

■ RELIABILITY TEST

ENVIRONMENT TEST

■ DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-----------------------------|--|---|--|
| 1 | RIPPLE & NOISE | V1 : 150 mVp-p (Max) | I/P : 230VAC O/P : FULL LOAD Ta : 25°C | V1 : 27.6 mVp-p (Max) |
| 2 | OUTPUT VOLTAGE ADJUST RANGE | CH1 : 22V ~ 27 V | I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25°C | 21.083 V ~ 28.163 V / 230 VAC 21.083 V ~ 28.162 V / 115 VAC |
| 3 | CURRENT ADJUST RANGE | CH1 : 2.72 A ~ 3.4 A | I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25°C | 2.092 A ~ 3.792 A / 230 VAC 2.107 A ~ 3.819 A / 115 VAC |
| 4 | OUTPUT VOLTAGE TOLERANCE | V1 : 1 %~ -1 % (Max) | I/P : 100 VAC / 305 VAC O/P : FULL/ MIN LOAD Ta : 25°C | V1 : 0.15 %~ -0.15 % |
| 5 | LINE REGULATION | V1 : 0.5 %~ -0.5 % (Max) | I/P : 100VAC ~ 305 VAC O/P : FULL LOAD Ta : 25°C | V1 : 0 %~ 0 % |
| 6 | LOAD REGULATION | V1 : 0.5%~ -0.5 % (Max) | I/P : 230 VAC O/P : FULL ~MIN LOAD Ta : 25°C | V1 : 0.13 %~ -0.13 % |
| 7 | SET UP TIME | 230VAC : 500 ms (Max) 115VAC : 1200 ms(Max) | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | 230VAC/ 271 ms 115VAC/ 272 ms |
| 8 | RISE TIME | 230VAC : 200 ms (Max) 115VAC : 200 ms (Max) | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | 230VAC/ 19 ms 115VAC/ 19 ms |
| 9 | HOLD UP TIME | 230VAC : 16 ms (TYP) 115VAC : 16 ms (TYP) | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | 230VAC/ 87 ms 115VAC/ 36 ms |
| 10 | OVER/UNDERSHOOT TEST | < ±5% | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | TEST : <5 % |
| 11 | DYNAMIC LOAD | V1 : 2400 mVp-p | I/P : 230 VAC (1).O/P : FULL /Min LOAD 90%DUTY/ 1KHZ (2).O/P : FULL /Min LOAD 50%DUTY/ 120HZ Ta : 25°C | (1)265 mVp-p (2)655 mVp-p |

| | | | | | | | | | | | | |
|----------------|----------------|---|------------------|--------|--------|--------|--------|--------|--------|--------|---------|------|
| 12 | DIMMER TEST | SPEC: | | | | | | | | | | |
| | | *Reference resistance value for output current adjustment (Typical) | | | | | | | | | | |
| | | Resistance value | 10K | 20K | 30K | 40K | 50K | 60K | 70K | 80K | 90K | 100K |
| | | Output current | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
| | | *1 ~ 10V dimming function for output current adjustment (Typical) | | | | | | | | | | |
| | | Dimming value | 1V | 2V | 3V | 4V | 5V | 6V | 7V | 8V | 9V | 10V |
| | | Output current | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
| | | *10V PWM signal for output current adjustment (Typical) | | | | | | | | | | |
| | | Duty value | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
| | | Output current | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
| | | TEST RESULT: I/P : 230 VAC ; Ta : 25°C | | | | | | | | | | |
| | | 1 | Resistance value | 10K | 20K | 30K | 40K | 50K | 60K | 70K | 80K | 90K |
| Output current | 0.257A | | 0.606A | 0.909A | 1.272A | 1.648A | 2.002A | 2.348A | 2.704A | 3.099A | 3.456A | |
| % | 7.56% | | 17.82% | 26.74% | 37.41% | 48.47% | 58.88% | 69.06% | 79.53% | 91.15% | 101.65% | |
| 2 | Dimming value | 1V | 2V | 3V | 4V | 5V | 6V | 7V | 8V | 9V | 10V | |
| | Output current | 0.248A | 0.599A | 0.890A | 1.250A | 1.614A | 1.973A | 2.330A | 2.686A | 3.048A | 3.409A | |
| | % | 7.29% | 17.62% | 26.18% | 36.76% | 47.47% | 58.03% | 68.53% | 79.00% | 89.65% | 100.26% | |
| 3 | Duty value | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | |
| | Output current | 0.339A | 0.689A | 1.033A | 1.369A | 1.724A | 2.079A | 2.433A | 2.788A | 3.145A | 3.498A | |
| | % | 9.97% | 20.26% | 30.38% | 40.26% | 50.71% | 61.15% | 71.56% | 82.00% | 92.50% | 102.88% | |

INPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-----------------------|---|---|---|
| 1 | INPUT VOLTAGE RANGE | 90VAC~305 VAC | I/P : TESTING O/P : FULL LOAD Ta : 25°C I/P : LOW-LINE=3V= 87 V HIGH-LINE=305 V O/P : FULL/MIN LOAD ON : 30 Sec. OFF : 30 Sec 10MIN (AC POWER ON/OFF NO DAMAGE) | 71 V~305V TEST : OK |
| 2 | INPUT FREQUENCY RANGE | 47HZ ~63 HZ NO DAMAGE | I/P : 90 VAC ~ 305 VAC O/P : FULL -MIN LOAD Ta : 25°C | TEST : OK |
| 3 | POWER FACTOR | 0.96 / 230 VAC(TYP) 0.96 / 115 VAC(TYP) 0.94 / 277 VAC(TYP) | I/P : 230 VAC I/P : 115 VAC I/P : 277 VAC O/P : FULL LOAD Ta : 25°C | PF= 0.964 / 230 VAC PF= 0.989 / 115 VAC PF= 0.945 / 277 VAC |
| 4 | EFFICIENCY | 90 % (TYP) | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | 91.64 % |

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|---|-----------------|--|---|---|
| 5 | INPUT CURRENT | 277V/ 0.4 A (TYP) 230V/ 0.425 A (TYP) 115V/ 0.85 A (TYP) | I/P : 277 VAC I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | I = 0.34 A/ 277 VAC I = 0.40 A/ 230 VAC I = 0.79 A/ 115 VAC |
| 6 | INRUSH CURRENT | 230V/ 70 A (TYP) COLD START | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | I = 69 A/ 230 VAC |
| 7 | LEAKAGE CURRENT | < 0.75 mA / 277 VAC | I/P : 277 VAC O/P : Min LOAD Ta : 25°C | L-FG : 0.2 mA N-FG : 0.2 mA |

PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-----------------------------|--|---|--|
| 1 | OVER LOAD PROTECTION | 95 % ~ 108 % | I/P : 230 VAC I/P : 115 VAC O/P : TESTING Ta : 25°C | 100.6 %/ 230 VAC 101 %/ 115 VAC Constant current limiting, recovers automatically after fault condition is removed |
| 2 | OVER VOLTAGE PROTECTION | CH1 : 28 V ~ 35 V | I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25°C | 30.333V/ 230 VAC 30.232V/ 115 VAC Shut down o/p voltage, re-power on to recover |
| 3 | OVER TEMPERATURE PROTECTION | NO DAMAGE | I/P : 230 VAC O/P : FULL LOAD | O.T.P. Active Shut down o/p voltage, re-power on to recover |
| 4 | SHORT PROTECTION | SHORT EVERY OUTPUT 1 HOUR NO DAMAGE | I/P : 305 VAC O/P : FULL LOAD Ta : 25°C | NO DAMAGE HICCUP |

COMPONENT STRESS TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|---|--------------------------|--|--|
| 1 | Power Transistor (D to S) or (C to E) Peak Voltage | Q1 Rated : 12A/700V | I/P : High-Line +3V = 308 V O/P : (1)Full Load Turn on (2) Output Short (3)Full load continue Ta : 25°C | (1) 628 V (2) 488 V (3) 620 V |
| 2 | Diode Peak Voltage | Q101 Rated : 80A/120V | I/P : High-Line +3V = 308 V O/P : (1)Full Load Turn on (2)Output Short (3)Full load continue Ta : 25°C | (1) 112 V (2) 86 V (3) 108 V |
| 3 | Clamp Diode Peak Voltage | D12 Rated : 2A/800V | I/P : High-Line +3V = 308 V O/P : (1) Dynamic Load 90%Duty/1KHz (2)Full load continue Ta : 25°C | (1) 604 V (2) 600 V |
| 4 | Input Capacitor Voltage | C5 Rated : 82u/450V | I/P : High-Line +3V = 308 V O/P : (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta : 25°C | (1) 420.48 V (2) 432.95 V (3) 432.40 V |
| 5 | Control IC Voltage Test | U1 Rated : 16V~38V | I/P : High-Line +3V = 308 V O/P : (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta : 25°C | (1) 21.342 V (2) 21.187 V (3) 21.193 V |
| 6 | Power Transistor (D to S) or (C to E) Peak Voltage | Q2 Rated : 10A/600V | I/P : High-Line +3V = 308 V O/P : (1)Full Load Turn on (2) Output Short (3)Full load continue Ta : 25°C | (1) 496 V (2) 464 V (3) 448 V |

■ SAFETY & E.M.C. TEST

SAFETY TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|--|--|---|
| 1 | WITHSTAND VOLTAGE | I/P-O/P : 3.75 KVAC/min I/P-FG : 2 KVAC/min<4.5mA O/P-FG : 1.5KVAC/min | I/P-O/P : 4 KVAC/min I/P-FG : 2.4KVAC/min O/P-FG : 1.8 KVAC/min Ta : 25°C | I/P-O/P : 2.376 mA I/P-FG : 2.180 mA O/P-FG : 0.448 mA NO DAMAGE |
| 2 | ISOLATION RESISTANCE | I/P-O/P : 500VDC>100MΩ I/P-FG : 500VDC>100MΩ O/P-FG : 500VDC>100MΩ | I/P-O/P : 500 VDC I/P-FG : 500 VDC O/P-FG : 500 VDC Ta : 25°C /70%RH | I/P-O/P : 30 GΩ I/P-FG : 30 GΩ O/P-FG : 30 GΩ NO DAMAGE |
| 3 | GROUNDING CONTINUITY | FG(PE) TO CHASSIS OR TRACE < 100 mΩ | 40 A / 2min Ta : 25°C / 70%RH | 9 mΩ |

E.M.C TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|------------|--|--|-------------------------------|
| 1 | HARMONIC | EN61000-3-2 CLASS A CLASS C | I/P: 230VAC50HZ O/P:100/75/60% ELECTRONICLOAD O/P:100%LED LOAD Ta:25°C | PASS |
| 2 | CONDUCTION | EN55022 EN55015 CLASS B | I/P: 230 VAC (50HZ) O/P:FULL/60% LOAD Ta:25°C | PASS Test by certified Lab |
| 3 | RADIATION | EN55022 EN55015 CLASS B | I/P: 230 VAC (50HZ) O/P:FULL LOAD Ta:25°C | PASS Test by certified Lab |
| 4 | E.S.D | EN61000-4-2 INDUSTRY AIR:8KV / Contact:4KV | I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A |
| 5 | E.F.T | EN61000-4-4 INDUSTRY INPUT: 2KV | I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A |
| 6 | SURGE | IEC61000-4-5 INDUSTRY L-N :2KV L,N-PE:4KV | I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A |

■ RELIABILITY TEST

ENVIRONMENT TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|--|--|------------------|----------|-----------------------------|----------------------------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|----|-----|--------|--------|----|------|--------|--------|----|----|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|--|
| 1 | TEMPERATURE RISE TEST | MODEL : HLP-80H-24 1. ROOM AMBIENT BURN-IN : 12 HRS I/P : 230VAC O/P : 95% LOAD Ta=24.7 °C 2. HIGH AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : 95% LOAD Ta=51.5 °C | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta= 24.7 °C</th> <th>HIGH AMBIENT Ta=51.5 °C</th> </tr> </thead> <tbody> <tr><td>1</td><td>LF2</td><td>48.4°C</td><td>73.1°C</td></tr> <tr><td>2</td><td>D6</td><td>65.0°C</td><td>87.0°C</td></tr> <tr><td>3</td><td>L3</td><td>57.6°C</td><td>80.4°C</td></tr> <tr><td>4</td><td>BD1</td><td>57.0°C</td><td>81.2°C</td></tr> <tr><td>5</td><td>C5</td><td>57.9°C</td><td>81.4°C</td></tr> <tr><td>6</td><td>Q1</td><td>62.6°C</td><td>87.3°C</td></tr> <tr><td>7</td><td>D12</td><td>67.4°C</td><td>91.5°C</td></tr> <tr><td>8</td><td>Q2</td><td>59.8°C</td><td>84.1°C</td></tr> <tr><td>9</td><td>T1</td><td>68.0°C</td><td>90.9°C</td></tr> <tr><td>10</td><td>C18</td><td>55.0°C</td><td>78.6°C</td></tr> <tr><td>11</td><td>RTH2</td><td>54.9°C</td><td>79.3°C</td></tr> <tr><td>12</td><td>U1</td><td>57.4°C</td><td>80.1°C</td></tr> <tr><td>13</td><td>Q101</td><td>55.5°C</td><td>80.5°C</td></tr> <tr><td>14</td><td>C152</td><td>60.7°C</td><td>84.4°C</td></tr> <tr><td>15</td><td>L100</td><td>43.0°C</td><td>66.8°C</td></tr> <tr><td>16</td><td>C106</td><td>47.1°C</td><td>70.9°C</td></tr> </tbody> </table> | NO | Position | ROOM AMBIENT Ta= 24.7 °C | HIGH AMBIENT Ta=51.5 °C | 1 | LF2 | 48.4°C | 73.1°C | 2 | D6 | 65.0°C | 87.0°C | 3 | L3 | 57.6°C | 80.4°C | 4 | BD1 | 57.0°C | 81.2°C | 5 | C5 | 57.9°C | 81.4°C | 6 | Q1 | 62.6°C | 87.3°C | 7 | D12 | 67.4°C | 91.5°C | 8 | Q2 | 59.8°C | 84.1°C | 9 | T1 | 68.0°C | 90.9°C | 10 | C18 | 55.0°C | 78.6°C | 11 | RTH2 | 54.9°C | 79.3°C | 12 | U1 | 57.4°C | 80.1°C | 13 | Q101 | 55.5°C | 80.5°C | 14 | C152 | 60.7°C | 84.4°C | 15 | L100 | 43.0°C | 66.8°C | 16 | C106 | 47.1°C | 70.9°C | |
| NO | Position | ROOM AMBIENT Ta= 24.7 °C | HIGH AMBIENT Ta=51.5 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | LF2 | 48.4°C | 73.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | D6 | 65.0°C | 87.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | L3 | 57.6°C | 80.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BD1 | 57.0°C | 81.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | C5 | 57.9°C | 81.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Q1 | 62.6°C | 87.3°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | D12 | 67.4°C | 91.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Q2 | 59.8°C | 84.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | T1 | 68.0°C | 90.9°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | C18 | 55.0°C | 78.6°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | RTH2 | 54.9°C | 79.3°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | U1 | 57.4°C | 80.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Q101 | 55.5°C | 80.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | C152 | 60.7°C | 84.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | L100 | 43.0°C | 66.8°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | C106 | 47.1°C | 70.9°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | LOW TEMPERATURE TURN ON TEST | TURN ON AFTER 2 HOUR | I/P : 305VAC/100VAC O/P : 95% LOAD Ta= -40°C / -25°C | TEST : OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST | AFTER 12 HOURS IN CHAMBER ON CONTROL 50 °C NO DAMAGE | I/P : 305 VAC O/P : 95% LOAD Ta= 50 °C HUMIDITY= 95 %R.H | TEST : OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | TEMPERATURE COEFFICIENT | ± 0.03 %(0-50°C) | I/P : 230 VAC O/P : 95% LOAD | ± 0.01 %(0-50°C) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | STORAGE TEMPERATURE TEST | 1. Thermal shock Temperature : -45°C~ +90°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 5 CYCLE 5. Input/Output condition : STATIC | | OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | THERMAL SHOCK TEST | 1. Thermal shock Temperature : -45°C~ +55°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10 CYCLE 5. Input/Output condition : 230VAC/Full Load AC ON/OFF TEST turn on 58sec ; turn off 2sec | | OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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|----|-----------------------------|--|--|
| 7 | VIBRATION TEST | 1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10-500Hz (3) Sweep Time : 12min/sweep cycle (4) Acceleration : 2G (5) Test Time : 60min in each axis (X.Y.Z) (6) Ta : 25°C | TEST : OK |
| 8 | CAPACITOR LIFE CYCLE | HLP-80H-24:SUPPOSE C106 IS THE MOST CRITICAL COMPONENT (1) I/P : 230VAC O/P : FULL LOAD Ta=25 °C LIFE TIME (2) I/P : 230VAC O/P : FULL LOAD Ta=50 °C LIFE TIME (3) I/P : 230VAC O/P : 75% LOAD Ta= 50 °C LIFE TIME (4) I/P : 230VAC O/P : 50% LOAD Ta= 50 °C LIFE TIME | (1) 636190 HRS (2) 138414 HRS (3) 168116 HRS (4) 204158 HRS |
| 9 | MTBF | MIL-HDBK-217F NOTICES2 PARTS COUNT TOTAL FAILURE RATE : 316.2 KHRS | |
| 10 | DMTBF/Accelerated Life Test | Demonstration Mean Time Between Failure(Expected Life) : 30,000 hours @ TA 50°C | |

| DATE | SAMPLE | TEST RESULT | TESTER | APPROVAL |
|------------|----------------|-------------|------------|---------------|
| 2010/11/5 | RD SAMPLE | PASS | SANFORD SU | VINCENT TSENG |
| 2010/12/24 | PRODUCT SAMPLE | PASS | SANFORD SU | VINCENT TSENG |

2009/08/04 A50-F023