



Test Report: UHP-350-4.2

350W Slim Type with PFC Switching Power Supply

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test

E.M.C. Test

■ RELIABILITY TEST

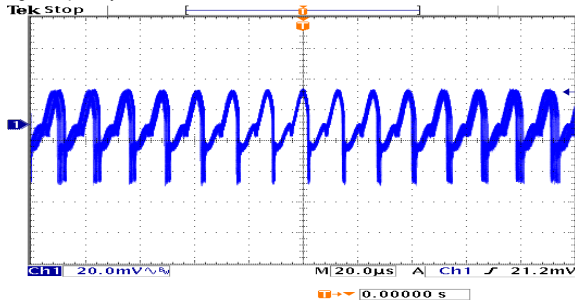
Environment Test

DESIGN VERIFY TEST

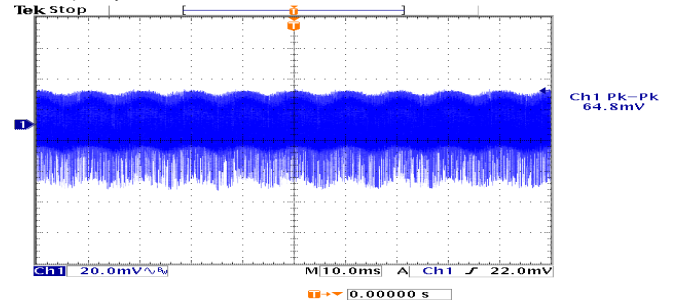
OUTPUT FUNCTION TEST

| N O | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|-----|-----------------------------|---------------|---|---------------|
| 1 | OUTPUT VOLTAGE ADJUST RANGE | 3.6V~4.4V | I/P: 230VAC O/P: NO LOAD Ta: 25°C | 3.50V~ 4.60 V |
| 2 | OUTPUT VOLTAGE TOLERANCE | -2%~+2% | I/P: 110VAC / 264VAC O/P: FULL / NO LOAD Ta: 25°C | -0.47%~+0.47% |
| 3 | LINE REGULATION | -0.5%~+0.5% | I/P: 180VAC ~ 264VAC O/P: FULL LOAD Ta: 25°C | -0.2%~+0.2% |
| 4 | LOAD REGULATION | -1%~+1% | I/P: 230VAC O/P: FULL ~NO LOAD Ta: 25°C | -0.47%~+0.47% |
| 5 | OVER/UNDERSHOOT TEST | <± 10 % | I/P: 230VAC O/P: FULL LOAD Ta: 25°C | <10% |
| 6 | RIPPLE & NOISE (Max) | 150mVp-p | I/P: 230VAC O/P: FULL LOAD Ta: 25°C | 64.8mVp-p |

high frequency :



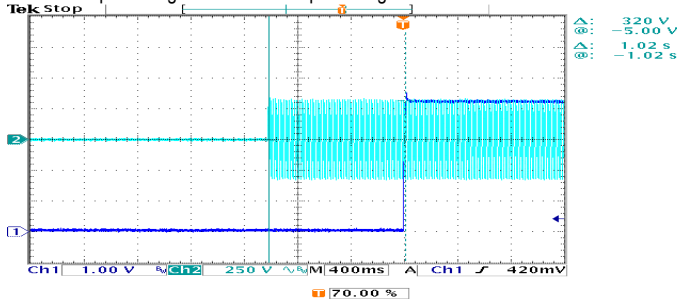
low frequency :



| | | | | |
|---|------------------|----------------------------------|--|---------------------------------|
| 7 | SET UP TIME(Max) | 230VAC/ 2000ms 115VAC/ 3000ms | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | 230VAC/1020 ms 115VAC/896 ms |
|---|------------------|----------------------------------|--|---------------------------------|

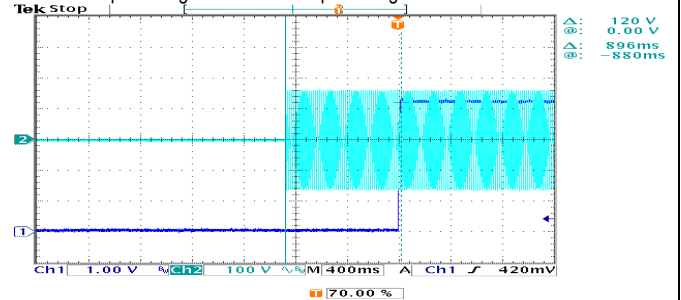
INPUT=230VAC/50HZ @ FULL LOAD

CH1: Output Voltage CH2: AC Input Voltage



INPUT=115VAC/60HZ @ FULL LOAD

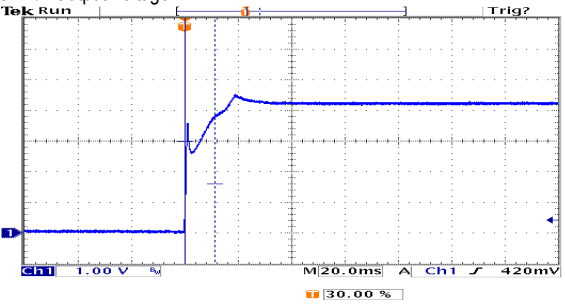
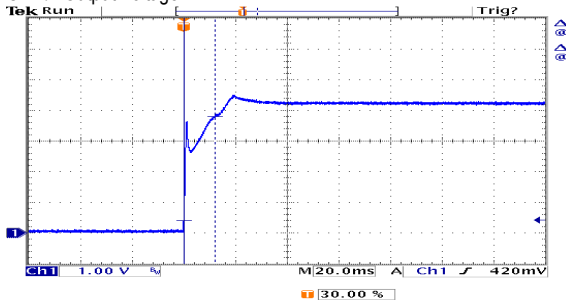
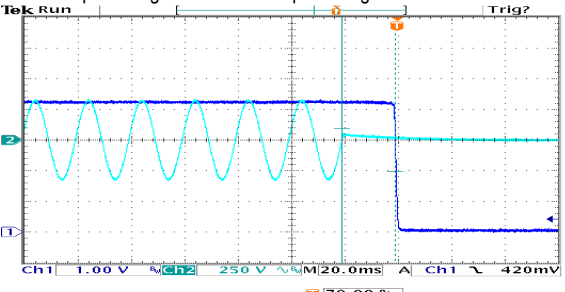
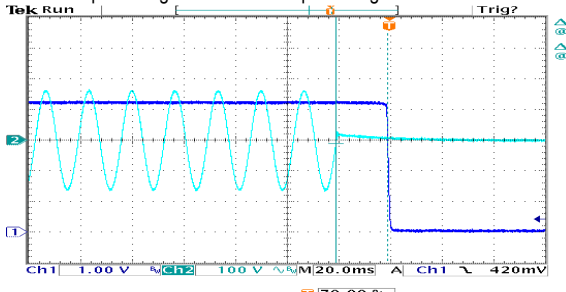
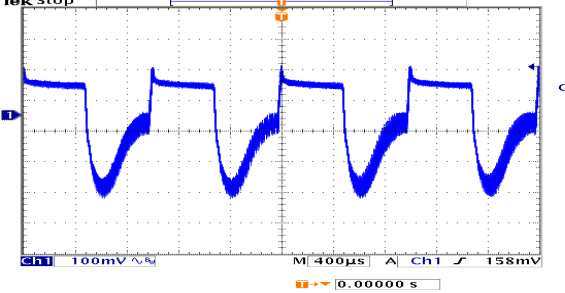
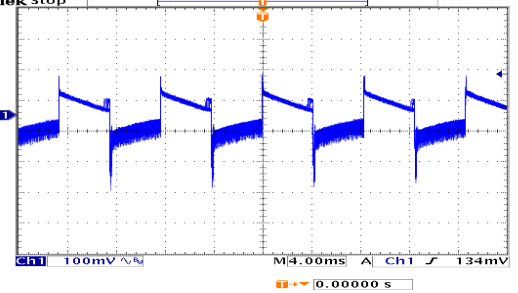
CH1: Output Voltage CH2: AC Input Voltage





350W Slim Type with PFC Switching Power Supply

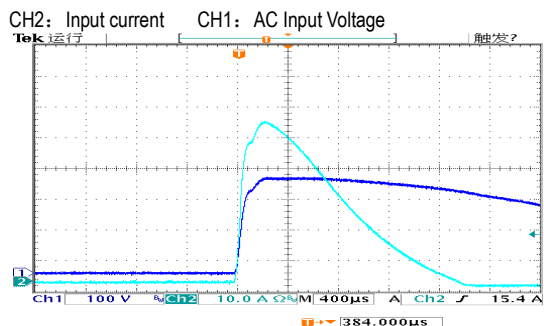
UHP-350 series

| | | | | |
|---|-------------------|--|--|----------------------------------|
| 8 | RISE TIME (Max) | 230VAC/ 80ms 115VAC/ 80ms | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | 230VAC/11.2 ms 115VAC/12.0 ms |
| <p>INPUT=230VAC/50HZ @ FULL LOAD</p> <p>CH1: Output Voltage</p>  | | <p>INPUT=115VAC/60HZ @ FULL LOAD</p> <p>CH1: Output Voltage</p>  | | |
| 9 | HOLD UP TIME(Typ) | 230VAC/ 10ms 115VAC/ 10ms | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | 230VAC/20.0 ms 115VAC/20.0 ms |
| <p>INPUT=230VAC/50HZ @ FULL LOAD</p> <p>CH1: Output Voltage CH2: AC Input Voltage</p>  | | <p>INPUT=115VAC/60HZ @ FULL LOAD</p> <p>CH1: Output Voltage CH2: AC Input Voltage</p>  | | |
| 10 | DYNAMIC LOAD | V1: 840 mVp-p | I/P: 230VAC O/P: (1)FULL/50% LOAD 50%DUTY / 120HZ (2)FULL/50% LOAD 50%DUTY / 1KHZ Ta: 25°C | (1) 420mVp-p (2) 346mVp-p |
| <p>FULL /50% LOAD 50%DUTY / 120HZ</p>  | | <p>FULL /50% LOAD 50%DUTY / 1KHZ</p>  | | |

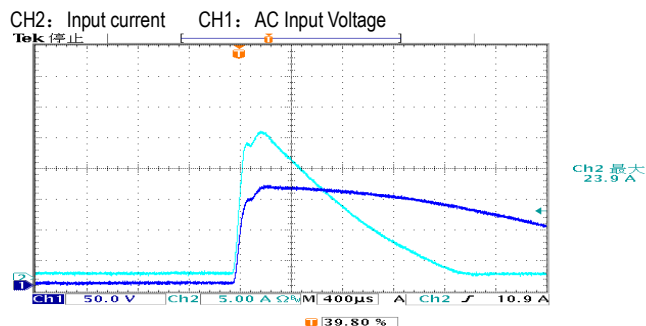
INPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|------------------------|---|--|--|
| 1 | INPUT VOLTAGE RANGE | 90VAC~264VAC | I/P: TESTING O/P: 75%~FULL LOAD Ta: 25°C | 87 V~300V |
| | | | I/P: (1)LOW-LINE-3V=87 V HIGH-LINE+15%=300 V O/P: 90%/FULL/NO LOAD ON: 30 Sec OFF: 30 Sec 10MIN (2)230VAC ON: 0.5 Sec OFF: 0.5 Sec 20MIN (POWER ON/OFF NO DAMAGE) | TEST: OK |
| 2 | Withstand 300VAC Surge | 300VAC input for 5 seconds No damage | I/P: 300VAC O/P: FULL LOAD Ta: 25°C | TEST: OK |
| 3 | INPUT FREQUENCY RANGE | 47HZ ~63 HZ NO DAMAGE | I/P: 90 VAC ~264 VAC O/P: FULL~NO LOAD Ta: 25°C | TEST: OK |
| 4 | AC CURRENT | 4.0A/115VAC 2.0A/230VAC | I/P: 115 VAC I/P: 230 VAC O/P: FULL LOAD Ta: 25°C | I = 2.50 A/ 115VAC I = 1.28 A/ 230VAC |
| 5 | LEAKAGE CURRENT | < 0.75mA / 240VAC | I/P: 240 VAC O/P: NO LOAD Ta: 25°C | L-FG: 0.287 mA N-FG: 0.272 mA |
| 6 | NO LOAD CONSUMPTION | --- | I/P: 115VAC I/P: 230VAC O/P: NO LOAD Ta: 25°C | 4.14 W/115VAC 3.41 W/230VAC |
| 7 | INRUSH CURRENT(Typ) | 230V/ 60A 115V/ 30A COLD START | I/P: 230 VAC/115VAC O/P: FULL LOAD Ta: 25°C | I = 52.2A/ 230VAC I = 23.9A/ 115VAC |

INPUT=230VAC/50HZ @ FULL LOAD



INPUT=115VAC/60HZ @ FULL LOAD



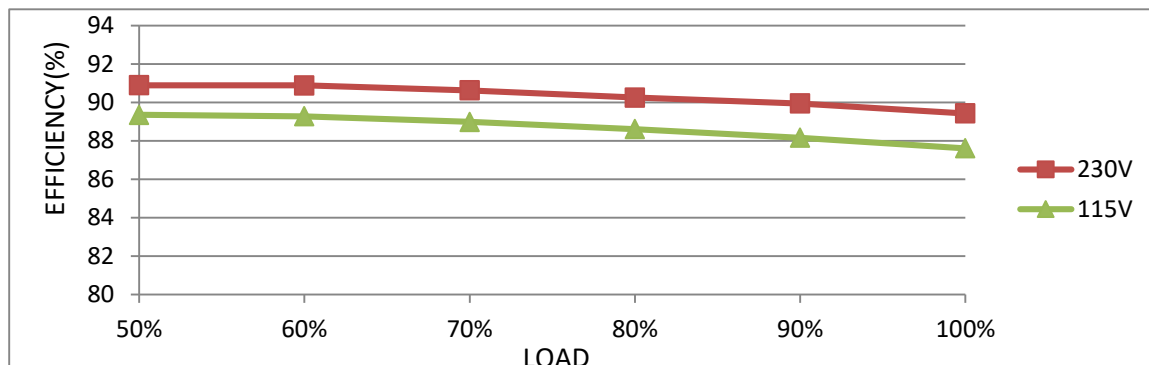


350W Slim Type with PFC Switching Power Supply

UHP-350 series

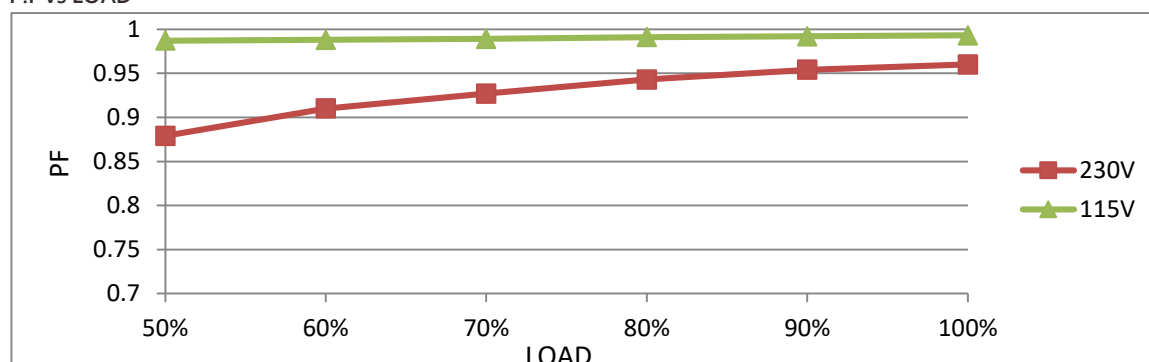
| | | | | |
|---|-----------------|-----|---|---------|
| 8 | EFFICIENCY(Typ) | 89% | I/P: 230VAC O/P: FULL LOAD Ta: 25°C | 89.42 % |
|---|-----------------|-----|---|---------|

EFFICIENCY vs LOAD



| | | | | |
|---|--------------|-----------------------------|--|--------------------------------------|
| 9 | POWER FACTOR | 0.94/ 230VAC 0.98/115VAC | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | PF=0.960/ 230VAC PF=0.993/ 115VAC |
|---|--------------|-----------------------------|--|--------------------------------------|

P.F vs LOAD



PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-----------------------------|---------------|---|---|
| 1 | OVER CURRENT PROTECTION | 110~140% | I/P: 110VAC I/P: 230VAC I/P: 264VAC O/P: TESTING Ta: 25°C | 123.3%/ 110VAC 123.0%/ 230VAC 123.0 %/ 264VAC Hiccup mode, recovers automatically after fault condition is removed |
| 2 | OVER VOLTAGE PROTECTION | 4.62V~5.46V | I/P: 90VAC I/P: 230VAC I/P: 264VAC O/P: NO LOAD Ta: 25°C | 5.124 V/ 90VAC 5.125 V/ 230VAC 5.123V/ 264VAC Shut down o/p voltage, re-power on to recovery |
| 3 | OVER TEMPERATURE PROTECTION | NO DAMAGE | I/P: 100VAC I/P: 230VAC I/P: 264VAC O/P: 90%/FULL LOAD | O.T.P. Active Shut down o/p voltage, recovers automatically after temperature goes down |

CONTROL FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|---|--|-----------|
| 1 | REDUNDANT CONTROL | For parallel connection protection:For parallel applications,when one PSU can not work,the another one will be automatically enabled.This can preven the system crash,and provide the reliability of system | I/P: 230 VAC O/P:FULL LOAD | TEST : OK |
| 2 | DCOK CONTACT RATINGS | 15VDC/10mA RESISTIVE LOAD | I/P:230VAC O/P:FULL LOAD Ta:25°C | TEST : OK |

COMPONENT STRESS TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|------------------------|--|--|
| 1 | PWM Power Transistor | Q10 Rated 24A/600V | I/P: High-Line +3V =267V O/P: (1) FULL LOAD Turn on (2) Output Short (3) FULL LOAD continue Ta: 25°C | (1) 504 V (2) 519 V (3) 503 V |
| 2 | O/P Diode (MOSFET) | Q100 Rated 170A/30V | I/P: High-Line +3V =267V O/P: (1) FULL LOAD Turn on (2) Output Short (3) FULL LOAD continue Ta: 25°C | (1) 10.1 V (2) 3.84 V (3) 9.8 V |
| 3 | Input Capacitor | C5 Rated 180u/450V | I/P: High-Line +3V =267 V O/P: (1) FULL LOAD input on/off (2) NO LOAD input on /Off (3) FULL LOAD /NO LOAD Change Ta: 25°C | (1) 440 V (2) 428 V (3) 428 V |
| 4 | Control IC | U1 Rated 16V (MAX.) | I/P: High-Line +3V =267 V O/P: ((1) FULL LOAD (2) Output Short (3) O.L.P (4) O.V.P (5) Low Line No Load Vo(min) Ta: 25°C | (1) 13.3 V (2) 13.3 V (3) 13.2 V (4) 13.1 V (5) 10.6 V |
| 5 | PFC Power Transistor | Q 1 Rated 24A/600V | I/P: High-Line +3V =267V O/P: (1) FULL LOAD Turn on (2) Output Short (3) FULL LOAD continue Ta: 25°C | (1) 464 V (2) 442 V (3) 463 V |

SAFETY TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|---|---|--|
| 1 | WITHSTAND VOLTAGE | I/P-O/P: 3.75 KVAC/min I/P-FG: 2.0 KVAC/min O/P-FG: 1.25 KVAC/min | I/P-O/P: 4.2 KVAC/min I/P-FG: 2.4 KVAC/min O/P-FG: 1.5 KVAC/min Ta: 25°C | I/P-O/P: 2.454 mA I/P-FG: 2.194 mA O/P-FG: 11.24 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: >9999 MΩ I/P-FG: >9999 MΩ O/P-FG: >9999 MΩ |
| 3 | GROUNDING CONTINUITY | FG(PE) TO CHASSIS OR TRACE < 100 mΩ | 40A / 2min Ta: 25°C | 9 mΩ |

E.M.C TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|---|---|---|-------------------------------|
| 1 | HARMONIC | EN61000-3-2 | I/P: 230VAC/50HZ O/P: FULL LOAD Ta: 25°C | PASS |
| 2 | CONDUCTION | EN55032 CLASS B | I/P: 230 VAC (50HZ) O/P: FULL LOAD Ta: 25°C | PASS Test by certified Lab |
| 3 | RADIATION | EN55032 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 HEAVY INDUSTRY AIR: 8KV Contact: 4KV | I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C | PASS CRITERIA A |
| 5 | E.F.T | EN61000-4-4 HEAVY INDUSTRY INPUT: 2KV | I/P: 230VAC/50HZ O/P: FULL LOAD Ta: 25°C | PASS CRITERIA A |
| 6 | SURGE | EN61000-4-5 HEAVY INDUSTRY L-N: 2KV L,N-PE: 4KV | I/P: 230VAC/50HZ O/P: FULL LOAD Ta: 25°C | PASS CRITERIA A |
| 7 | Test by certified Lab & Test Report Prepare | | | |

RELIABILITY TEST

ENVIRONMENT TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|--|--|---|----|----------|-------------------------|-------------------------|---|-----|--------|--------|---|------|--------|--------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|-----|--------|--------|---|----|--------|--------|----|----|--------|--------|----|-----|--------|--------|----|----|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|----|--------|--------|----|----|--------|--------|
| 1 | TEMPERATURE RISE TEST | MODEL: UHP-350-5 1. ROOM AMBIENT BURN-IN: 2 HRS I/P: 230VAC O/P: FULL LOAD Ta=26.2°C 2. HIGH AMBIENT BURN-IN: 2 HRS I/P: 230VAC O/P: FULL LOAD Ta=49.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta=26.2 °C</th> <th>HIGH AMBIENT Ta=49.5 °C</th> </tr> </thead> <tbody> <tr><td>1</td><td>LF2</td><td>48.8°C</td><td>71.0°C</td></tr> <tr><td>2</td><td>ZNR1</td><td>47.0°C</td><td>69.7°C</td></tr> <tr><td>3</td><td>BD1</td><td>53.4°C</td><td>75.5°C</td></tr> <tr><td>4</td><td>L1</td><td>61.2°C</td><td>85.3°C</td></tr> <tr><td>5</td><td>C5</td><td>50.4°C</td><td>73.1°C</td></tr> <tr><td>6</td><td>Q1</td><td>49.5°C</td><td>72.0°C</td></tr> <tr><td>7</td><td>D1</td><td>50.9°C</td><td>73.4°C</td></tr> <tr><td>8</td><td>C36</td><td>52.9°C</td><td>75.9°C</td></tr> <tr><td>9</td><td>U1</td><td>48.3°C</td><td>71.1°C</td></tr> <tr><td>10</td><td>U2</td><td>47.9°C</td><td>70.6°C</td></tr> <tr><td>11</td><td>Q11</td><td>60.4°C</td><td>84.1°C</td></tr> <tr><td>12</td><td>T1</td><td>71.6°C</td><td>96.0°C</td></tr> <tr><td>13</td><td>Q103</td><td>60.2°C</td><td>85.1°C</td></tr> <tr><td>14</td><td>Q202</td><td>68.8°C</td><td>93.4°C</td></tr> <tr><td>15</td><td>U100</td><td>51.6°C</td><td>74.3°C</td></tr> <tr><td>16</td><td>C106</td><td>66.5°C</td><td>91.2°C</td></tr> <tr><td>17</td><td>C108</td><td>70.1°C</td><td>95.0°C</td></tr> <tr><td>18</td><td>TSW1</td><td>54.5°C</td><td>77.6°C</td></tr> <tr><td>19</td><td>U4</td><td>48.7°C</td><td>71.5°C</td></tr> <tr><td>20</td><td>TC</td><td>46.2°C</td><td>68.4°C</td></tr> </tbody> </table> | NO | Position | ROOM AMBIENT Ta=26.2 °C | HIGH AMBIENT Ta=49.5 °C | 1 | LF2 | 48.8°C | 71.0°C | 2 | ZNR1 | 47.0°C | 69.7°C | 3 | BD1 | 53.4°C | 75.5°C | 4 | L1 | 61.2°C | 85.3°C | 5 | C5 | 50.4°C | 73.1°C | 6 | Q1 | 49.5°C | 72.0°C | 7 | D1 | 50.9°C | 73.4°C | 8 | C36 | 52.9°C | 75.9°C | 9 | U1 | 48.3°C | 71.1°C | 10 | U2 | 47.9°C | 70.6°C | 11 | Q11 | 60.4°C | 84.1°C | 12 | T1 | 71.6°C | 96.0°C | 13 | Q103 | 60.2°C | 85.1°C | 14 | Q202 | 68.8°C | 93.4°C | 15 | U100 | 51.6°C | 74.3°C | 16 | C106 | 66.5°C | 91.2°C | 17 | C108 | 70.1°C | 95.0°C | 18 | TSW1 | 54.5°C | 77.6°C | 19 | U4 | 48.7°C | 71.5°C | 20 | TC | 46.2°C | 68.4°C |
| NO | Position | ROOM AMBIENT Ta=26.2 °C | HIGH AMBIENT Ta=49.5 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | LF2 | 48.8°C | 71.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | ZNR1 | 47.0°C | 69.7°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | BD1 | 53.4°C | 75.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | L1 | 61.2°C | 85.3°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | C5 | 50.4°C | 73.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Q1 | 49.5°C | 72.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | D1 | 50.9°C | 73.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | C36 | 52.9°C | 75.9°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | U1 | 48.3°C | 71.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | U2 | 47.9°C | 70.6°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Q11 | 60.4°C | 84.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | T1 | 71.6°C | 96.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Q103 | 60.2°C | 85.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Q202 | 68.8°C | 93.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | U100 | 51.6°C | 74.3°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | C106 | 66.5°C | 91.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | C108 | 70.1°C | 95.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | TSW1 | 54.5°C | 77.6°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | U4 | 48.7°C | 71.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | TC | 46.2°C | 68.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | LOW TEMPERATURE TURN ON TEST | TURN ON AFTER 2 HOUR | I/P: 264VAC/90VAC O/P: FULL /75% LOAD Ta= -35°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: 264VAC O/P: FULL LOAD Ta=50°C HUMIDITY= 95%R.H | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | TEMPERATURE COEFFICIENT | ± 0.03 %/°C(0~50°C) | I/P: 230 VAC O/P: FULL LOAD | ± 0.009%/°C(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 | | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



350W Slim Type with PFC Switching Power Supply

UHP-350 series

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| 6 | THERMAL SHOCK TEST | 1. Thermal shock Temperature: -35°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 AC on 3 sec/AC off 1 sec TEST | TEST: OK |
| 7 | VIBRATION TEST | 1 Carton & 1 Set (1) Waveform: Sine Wave (2) Frequency: 10~500Hz (3) Sweep Time: 10min/sweep cycle (4) Acceleration: 5G (5) Test Time: 60min in each axes (X.Y.Z) (6) Ta: 25°C | TEST: OK |
| 8 | CAPACITOR LIFE CYCLE | UHP-350-5: SUPPOSE C105 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) 1276527 HRS (2) 59708 HRS (3) 427592 HRS (4) 1607052 HRS |
| 9 | MTBF | Conducted by Parts Stress Analysis Prediction 1791.2K hrs min. Telcordia SR-332 (Bellcore); 253.4K hrs min. MIL-HDBK-217F (25°C) | |
| 10 | DMTBF/Accelerated Life Test | Demonstration Mean Time Between Failure(Expected Life) : 30,000 hours @ Ta 50 °C | |

| TEST RESULT | TESTER | REVIEW | APPROVAL |
|-------------|---------------|--------|----------|
| PASS | SHENJW/ZHUOKB | SKY | LIUWY |