



Test Report: LRS-350-24

350W Single Output Switching Power Supply

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Component Stress Test

■ SAFETY TEST

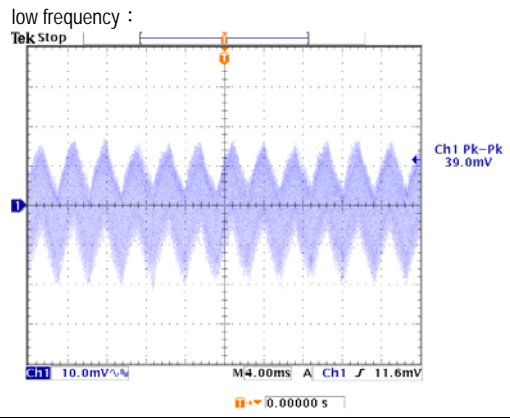
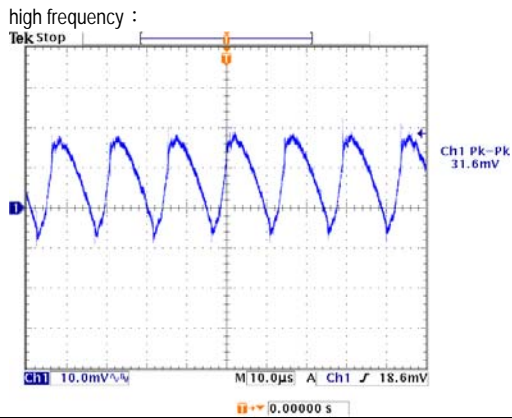
■ RELIABILITY TEST

ENVIRONMENT TEST

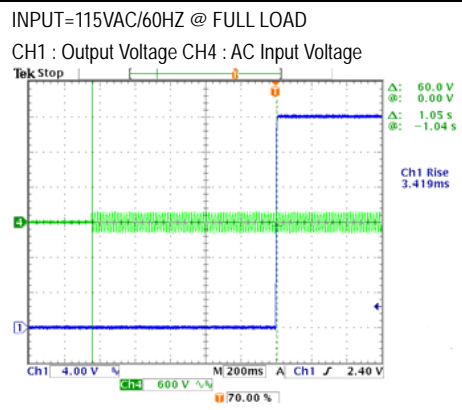
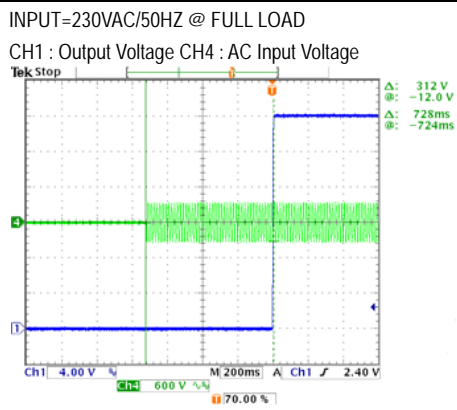
DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-------------------------------|-------------------|---|--|
| 1 | OUTPUT VOLTAGE ADJUST RANGE | CH1: 21.6V~ 28.8V | I/P: 230 VAC I/P: 115 VAC O/P: MIN LOAD Ta: 25°C | 21.26V~30.02V/230VAC 21.23V~30.02V/115VAC |
| 2 | OUTPUT VOLTAGE(Max) TOLERANCE | V1: -1 %~ 1% | I/P: 100VAC /264VAC O/P:FULL/ MIN. LOAD Ta:25°C | V1:- 0.0625 %~ 0.0625% |
| 3 | LINE REGULATION (Max) | V1: -0.5 %~ 0.5 % | I/P: 100VAC~ 264VAC O/P:FULL LOAD Ta:25°C | V1: -0.0625 %~-0.0625% |
| 4 | LOAD REGULATION(Max) | V1: 0.5 %~ -0.5 % | I/P: 230VAC O/P:FULL -MIN LOAD Ta:25°C | V1: 0.0%~ 0% |
| 5 | OVER/UNDERSHOOT TEST | < ±5% | I/P: 230VAC O/P:FULL LOAD Ta:25°C | <5% |
| 6 | RIPPLE & NOISE(Max) | V1: 150mVp-p | I/P:230VAC O/P:FULL LOAD Ta:25°C | V1: 39.0mVp-p |



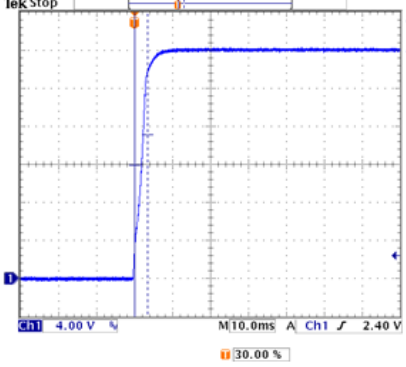
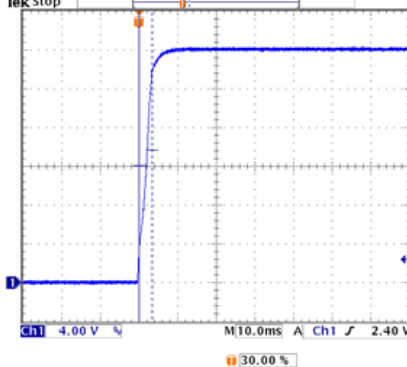
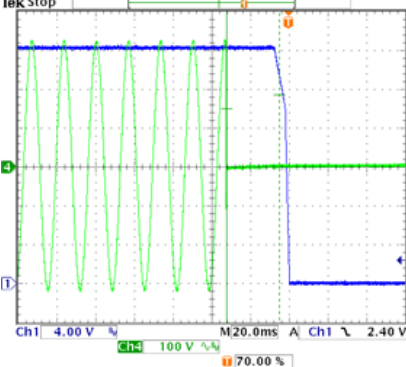
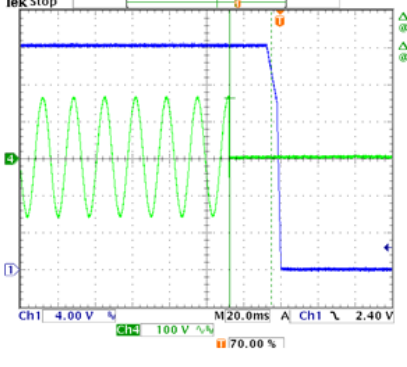
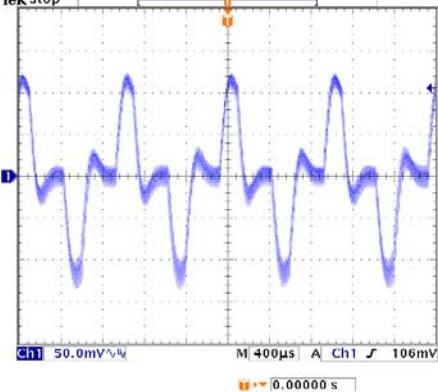
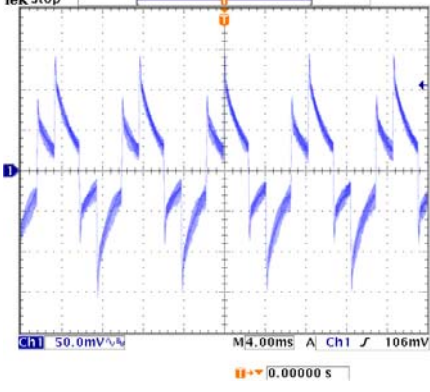
| | | | | |
|---|------------------|---------------------------------|--|---------------------------------|
| 7 | SET UP TIME(Max) | 230VAC/1300ms 115VAC/ 1300ms | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | 230VAC/ 728ms 115VAC/ 1050ms |
|---|------------------|---------------------------------|--|---------------------------------|





350W Single Output Switching Power Supply

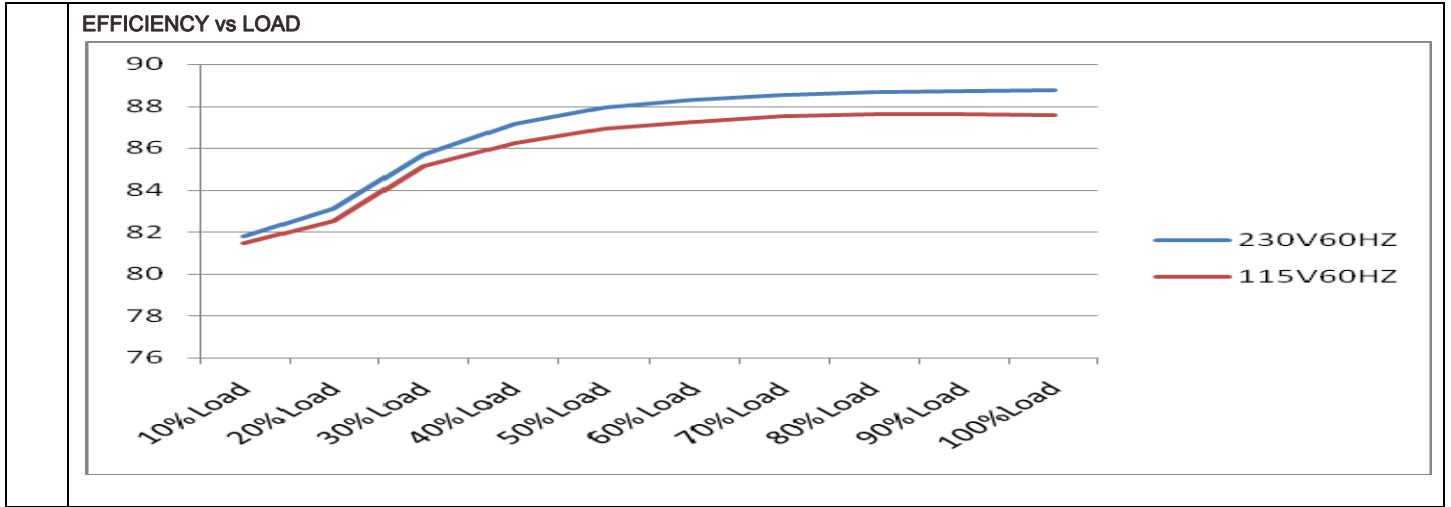
LRS-350series

| | | | |
|---|---|--|---------------------------------|
| 8 | RISE TIME (Max) 230VAC/ 50ms 115VAC/ 50ms | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | 230VAC/ 3.40ms 115VAC/3.40ms |
| INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage  | | INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage  | |
| 9 | HOLD UP TIME(Typ) 230VAC/ 16ms 115VAC/ 12ms | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | 230VAC/27.2ms 115VAC/ 22.4ms |
| INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH4 : AC Input Voltage  | | INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH4 : AC Input Voltage  | |
| 10 | DYNAMIC LOAD V1: 2400mVp-p | I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25°C | 258mVp-p 301mVp-p |
| FULL /50% LOAD 50%DUTY / 120HZ  | | FULL /50% LOAD 50%DUTY / 1KHZ  | |



INPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|---|-----------------------|---|--|--|
| 1 | INPUT VOLTAGE RANGE | 180VAC-264VAC | I/P:TESTING O/P:FULL LOAD Ta:25°C | 138V-264V |
| | | | I/P: (1)LOW-LINE-3V=167 V HIGH-LINE+15%=300 V O/P:FULL/MIN LOAD ON: 30 Sec OFF: 30 Sec 10MIN (2)230Vac ON: 0.5 Sec OFF: 0.5 Sec 20MIN (3)230Vac ON:3Sec OFF:3Sec 12HOURS (POWER ON/OFF NO DAMAGE) | TEST:OK |
| 2 | INPUT FREQUENCY RANGE | 47HZ -63 HZ NO DAMAGE | I/P:170 VAC ~264 VAC O/P:FULL-MIN LOAD Ta:25°C | TEST: OK |
| 3 | INPUT CURRENT (Typ) | 230V/ 3.4A 115V/ 6.8A | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | I =2.659A/ 230VAC I =5.018A/ 115VAC |
| 4 | LEAKAGE CURRENT | < 2 mA / 240 VAC | I/P: 240 VAC O/P: Min LOAD Ta: 25°C | L-FG: 0.495mA N-FG: 0.495mA |
| 5 | NO LOAD CONSUMPTION | < 0.75 W | I/P: 115VAC I/P: 230VAC O/P: NO LOAD Ta: 25°C | < 0.53W < 0.59 W |
| 6 | INRUSH CURRENT(Typ) | 230V/ 60A 115V/ 60A COLD START | I/P: 230 VAC I/P: 115 VAC O/P: FULL LOAD Ta: 25°C | I =54.8A/ 230VAC I =51.6A/ 115VAC |
| INPUT=230VAC/50HZ @ FULL LOAD CH2 : Input current (1V=1A) CH4 : AC Input Voltage | | INPUT=115VAC/50HZ @ FULL LOAD CH2 : Input current (1V=1A) CH4 : AC Input Voltage | | |
| 7 | EFFICIENCY(Typ) | 88% | I/P:230 VAC O/P:FULL LOAD Ta:25°C | 88.8% |



PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-----------------------------|--|---|---|
| 1 | OVER LOAD PROTECTION | 110 %- 140 % | I/P: 230VAC I/P: 115VAC O/P: TESTING Ta: 25°C | 125.89%/ 230VAC 125.61%/115VAC Hiccup mode, recovers automatically after fault condition is removed |
| 2 | OVER VOLTAGE PROTECTION | CH: 28.8V-33.6 V | I/P: 230VAC I/P: 115VAC O/P: MIN LOAD Ta: 25°C | 32.1V/ 230VAC 32.1V/115VAC Hiccup mode, recovers automatically after fault condition is removed |
| 3 | OVER TEMPERATURE PROTECTION | NO DAMAGE | I/P: 230 VAC O/P: FULL LOAD | O.T.P. Active Hiccup mode, recovers automatically after fault condition is removed |
| 4 | SHORT PROTECTION | SHORT EVERY OUTPUT 1 HOUR NO DAMAGE | I/P: 264VAC O/P: FULL LOAD Ta: 25°C | NO DAMAGE Hiccup mode, recovers automatically after fault condition is removed |

COMPONENT STRESS TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-----------|---------------|----------------|--------|
|----|-----------|---------------|----------------|--------|



350W Single Output Switching Power Supply

LRS-350series

| | | | | |
|---|--|---|--|--|
| 1 | PWM Transistor (D to S) or (C to E) Peak Voltage | Q1 Rated 13A/600V | I/P:High-Line +3V =267V O/P: (1)Full Load Turn on (2)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (3)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz Ta:25°C | (1)590V (2)588V (3)594V |
| 2 | Diode Peak Voltage | Q101 Rated 20 A/150V Q103 Rated 20A/200V | I/P:High-Line +3V =267 V O/P: (1)Full Load input on/off (2)Output Short Ta:25°C | Q101: (1)139V (2)113V Q103: (1)181V (2)173V |
| 3 | Input Capacitor Voltage | C5 Rated: 560 μ / 200V | I/P:High-Line +3V =267 V O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change Ta:25°C | (1)191V (2)188V (3)190V |
| 4 | Control IC Voltage Test | PWM IC U1 Rated 28 V (MAX.) 10V (MIN.) | I/P:High-Line +3V =267 V O/P: (1)Full Load input on/off (2) Output short (3)No load VR (min) Ta:25°C | U1 (1) 20.7V (2) 19.5V (3) 19.5V |

SAFETY TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|---|---|--|
| 1 | WITHSTAND VOLTAGE | I/P-O/P: 3KVAC/min I/P-FG :2KVAC/min O/P-FG:0.5KVAC/min | I/P-O/P: 3.6 KVAC/min I/P-FG: 2.4 KVAC/min O/P-FG:0.6 KVAC/min Ta:25°C | I I/P-O/P: 2.42mA I/P-FG: 3.32mA O/P-FG:2.71 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 | I/P-O/P: 9999MΩ I/P-FG: 9999MΩ O/P-FG: 9999MΩ NO DAMAGE |
| 3 | GROUNDING CONTINUITY | FG(PE) TO CHASSIS OR TRACE < 100 mΩ | 40A / 2min Ta:25°C | 24 mΩ |

RELIABILITY TEST



ENVIRONMENT TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|---|--|---|----|----------|--------------------------|-------------------------|---|-----|--------|--------|---|-----|--------|--------|---|------|--------|--------|---|----|--------|--------|---|----|--------|--------|---|-----|--------|--------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|----|-----|--------|--------|----|----|--------|--------|----|-----|--------|--------|----|------|--------|--------|----|------|--------|--------|----|--------|--------|--------|----|--------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|--------|----|----|--------|--------|----|-----|--------|--------|
| 1 | TEMPERATURE RISE TEST | MODEL: LRS-350-24 1. ROOM AMBIENT BURN-IN: 2 HRS I/P: 230VAC O/P: FULL LOAD Ta=31.6°C 2. HIGH AMBIENT BURN-IN: 2 HRS I/P: 230VAC O/P: FULL LOAD Ta=48.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta= 31.6 °C</th> <th>HIGH AMBIENT Ta=48.2 °C</th> </tr> </thead> <tbody> <tr><td>1</td><td>LF1</td><td>46.0°C</td><td>63.6°C</td></tr> <tr><td>2</td><td>BD1</td><td>48.0°C</td><td>63.7°C</td></tr> <tr><td>3</td><td>ZNR5</td><td>40.0°C</td><td>58.2°C</td></tr> <tr><td>4</td><td>C5</td><td>42.9°C</td><td>59.4°C</td></tr> <tr><td>5</td><td>C6</td><td>40.1°C</td><td>56.9°C</td></tr> <tr><td>6</td><td>C36</td><td>36.4°C</td><td>53.4°C</td></tr> <tr><td>7</td><td>C37</td><td>34.4°C</td><td>52.5°C</td></tr> <tr><td>8</td><td>T2</td><td>39.5°C</td><td>57.6°C</td></tr> <tr><td>9</td><td>Q1</td><td>60.5°C</td><td>77.5°C</td></tr> <tr><td>10</td><td>D10</td><td>43.2°C</td><td>60.7°C</td></tr> <tr><td>11</td><td>Q2</td><td>53.9°C</td><td>69.5°C</td></tr> <tr><td>12</td><td>D11</td><td>37.8°C</td><td>55.5°C</td></tr> <tr><td>13</td><td>Q102</td><td>58.9°C</td><td>73.5°C</td></tr> <tr><td>14</td><td>Q103</td><td>67.6°C</td><td>87.8°C</td></tr> <tr><td>15</td><td>T1coil</td><td>72.3°C</td><td>92.4°C</td></tr> <tr><td>16</td><td>T1core</td><td>56.1°C</td><td>72.8°C</td></tr> <tr><td>17</td><td>C200</td><td>48.2°C</td><td>63.8°C</td></tr> <tr><td>18</td><td>L101</td><td>53.6°C</td><td>70.4°C</td></tr> <tr><td>19</td><td>C201</td><td>54.2°C</td><td>70.2°C</td></tr> <tr><td>20</td><td>RTH3</td><td>64.6°C</td><td>80.3°C</td></tr> <tr><td>21</td><td>L100</td><td>64.7°C</td><td>82.1°C</td></tr> <tr><td>22</td><td>C105</td><td>45.6°C</td><td>64.4°C</td></tr> <tr><td>23</td><td>C221</td><td>48.0°C</td><td>63.8°C</td></tr> <tr><td>24</td><td>U1</td><td>37.9°C</td><td>56.1°C</td></tr> <tr><td>25</td><td>D30</td><td>39.4°C</td><td>58.8°C</td></tr> </tbody> </table> | NO | Position | ROOM AMBIENT Ta= 31.6 °C | HIGH AMBIENT Ta=48.2 °C | 1 | LF1 | 46.0°C | 63.6°C | 2 | BD1 | 48.0°C | 63.7°C | 3 | ZNR5 | 40.0°C | 58.2°C | 4 | C5 | 42.9°C | 59.4°C | 5 | C6 | 40.1°C | 56.9°C | 6 | C36 | 36.4°C | 53.4°C | 7 | C37 | 34.4°C | 52.5°C | 8 | T2 | 39.5°C | 57.6°C | 9 | Q1 | 60.5°C | 77.5°C | 10 | D10 | 43.2°C | 60.7°C | 11 | Q2 | 53.9°C | 69.5°C | 12 | D11 | 37.8°C | 55.5°C | 13 | Q102 | 58.9°C | 73.5°C | 14 | Q103 | 67.6°C | 87.8°C | 15 | T1coil | 72.3°C | 92.4°C | 16 | T1core | 56.1°C | 72.8°C | 17 | C200 | 48.2°C | 63.8°C | 18 | L101 | 53.6°C | 70.4°C | 19 | C201 | 54.2°C | 70.2°C | 20 | RTH3 | 64.6°C | 80.3°C | 21 | L100 | 64.7°C | 82.1°C | 22 | C105 | 45.6°C | 64.4°C | 23 | C221 | 48.0°C | 63.8°C | 24 | U1 | 37.9°C | 56.1°C | 25 | D30 | 39.4°C | 58.8°C |
| NO | Position | ROOM AMBIENT Ta= 31.6 °C | HIGH AMBIENT Ta=48.2 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | LF1 | 46.0°C | 63.6°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | BD1 | 48.0°C | 63.7°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | ZNR5 | 40.0°C | 58.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | C5 | 42.9°C | 59.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | C6 | 40.1°C | 56.9°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | C36 | 36.4°C | 53.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | C37 | 34.4°C | 52.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | T2 | 39.5°C | 57.6°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Q1 | 60.5°C | 77.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | D10 | 43.2°C | 60.7°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Q2 | 53.9°C | 69.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | D11 | 37.8°C | 55.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Q102 | 58.9°C | 73.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Q103 | 67.6°C | 87.8°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | T1coil | 72.3°C | 92.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | T1core | 56.1°C | 72.8°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | C200 | 48.2°C | 63.8°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | L101 | 53.6°C | 70.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | C201 | 54.2°C | 70.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | RTH3 | 64.6°C | 80.3°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | L100 | 64.7°C | 82.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | C105 | 45.6°C | 64.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | C221 | 48.0°C | 63.8°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | U1 | 37.9°C | 56.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | D30 | 39.4°C | 58.8°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | OVER LOAD BURN-IN TEST | NO DAMAGE 1 HOUR (MIN) | I/P: 230 VAC O/P: 125% LOAD Ta: 25°C | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | LOW TEMPERATURE TURN ON TEST | TURN ON AFTER 2 HOUR | I/P: 264VAC/100VAC O/P: 100 %LOAD Ta= -25 °C | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST | AFTER 12 HOURS IN CHAMBER ON CONTROL 50 °C NO DAMAGE | I/P: 272 VAC O/P: FULL LOAD Ta= 50 °C HUMIDITY= 95 %R.H | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | TEMPERATURE COEFFICIENT | ± 0.03 %/°C (0-50°C) | I/P: 230 VAC O/P: FULL LOAD | ±0%/°C (0-50°C) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



350W Single Output Switching Power Supply

LRS-350series

| | | | |
|----|-----------------------------|---|--|
| 7 | THERMAL SHOCK TEST | 1. Thermal shock Temperature : -25°C~ 70°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/Fu11 Load AC ON/OFF TEST turn on 58sec ; turn off 2sec | OK |
| 8 | 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 axis (X.Y.Z) (6) Ta: 25°C | TEST: OK |
| 9 | CAPACITOR LIFE CYCLE | 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) 1183522HRS (2) 183366HRS (3) 179584HRS (4) 1276086HRS |
| 10 | MTBF | MIL-HDBK-217F TOTAL FAILURE RATE: 327.9KHRS | |
| 11 | DMTBF/Accelerated Life Test | Demonstration Mean Time Between Failure (Expected Life): Above 30,000 hours @ TA 50°C | |

| TEST RESULT | TESTER | APPROVAL |
|-------------|--------|------------|
| PASS | FRANK | WANGDEZHAO |