



Test Report : GS25x24

25W AC/DC Green Adaptor

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

■ SAFETY TEST

Safety Test

E.M.C Test

■ RELIABILITY TEST

Environment Test

Other Test

DESIGN VERIFY TEST
OUTPUT FUNCTION TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|-------------------|-----------------|---|---------------------|---------|
| 1 | RIPPLE & NOISE | 180mVp-p (Max) | I/P:230VAC O/P:FULL LOAD Ta:25°C | 32 mVp-p | P |
| 2 | VOLTAGE TOLERANCE | -2% - +2% (Max) | I/P:90VAC~264VAC O/P:FULL-MIN. LOAD Ta:25°C | - 0 % ~ + 0.84 % | P |
| 3 | LINE REGULATION | -1% - +1% (Max) | I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C | - 0.05 % ~ + 0 % | P |
| 4 | LOAD REGULATION | -2% - +2% (Max) | I/P:230VAC O/P:FULL - MIN LOAD Ta:25°C | - 0.25 % ~ + 0.25 % | P |
| 5 | SET UP TIME | 500 mS (Max) | I/P:230VAC O/P:FULL LOAD Ta:25°C | 223 mS | P |
| 6 | RISE TIME | 30 mS (Max) | I/P:230VAC O/P:FULL LOAD Ta:25°C | 11.5 mS | P |
| 7 | HOLD UP TIME | 15 mS (Min) | I/P:115VAC O/P:FULL LOAD Ta:25°C | 17.7 mS | P |

INPUT FUNCTION TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|---------------------------|------------------------------------|--|--------------------------------------|---------|
| 1 | VOLTAGE RANGE | 100VAC ~ 240VAC (Typ) | I/P:TESTING O/P:FULL LOAD Ta:25°C | 64V ~ 264V | P |
| 2 | FREQUENCY RANGE | 50HZ - 60HZ (Typ) NO DAMAGE OSC | I/P: 100VAC ~ 240VAC O/P:FULL-MIN LOAD Ta:25°C | TEST: OK | P |
| 3 | EFFICIENCY | 85.5% (Typ) | I/P:230VAC O/P:FULL LOAD Ta:25°C | 87.4 % | P |
| 4 | AVERAGE EFFICIENCY | 82.35% (LEVEL V) | I/P:115/230VAC O/P:25% 、 50% 、 75% 、 100% LOAD Ta:25°C | 86.32 % (115VAC) 86.33 % (230VAC) | P |
| 5 | AC CURRENT | 0.7A (Max) | I/P: 100VAC O/P:FULL LOAD Ta:25°C | 0.48 A | P |
| 6 | NO LOAD POWER CONSUMPTION | < 0.3W | I/P:230VAC O/P: NO LOAD Ta:25°C | 0.18 W | P |

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|---|-----------------|---|--|--------------------------------|---|
| 7 | INRUSH CURRENT | < 45A COLD START | I/P:230VAC O/P:FULL LOAD Ta:25°C | 34.5 A | P |
| 8 | LEAKAGE CURRENT | < 0.75mA FOR CLASS I < 0.25mA FOR CLASS II | I/P:240VAC O/P:Min LOAD Ta:25°C | L-FG: 0.02 mA N-FG: 0.02 mA | P |

PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|-------------------------|--|--|--|---------|
| 1 | OVER LOAD PROTECTION | 110~150% (Typ) | I/P:230VAC O/P:TESTING Ta:25°C | 123 % HICCUP MODE RESET AUTO RECOVER | P |
| 2 | OVER VOLTAGE PROTECTION | CLAMP BY ZENER DIODE 105 - 135% | I/P:230VAC O/P:MIN LOAD Ta:25°C | CLAMP BY ZENER DIODE 125 % (30V) | P |
| 3 | SHORT PROTECTION | SHORT EVERY OUTPUT 1 HOUR NO DAMAGE | I/P:264VAC O/P:FULL LOAD Ta:25°C | NO DAMAGE HICCUP MODE RESET AUTO RECOVER | P |

■ SAFETY & E.M.C TEST

SAFETY TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|----------------------|----------------------|--------------------------------|-------------------------------|---------|
| 1 | WITHSTAND VOLTAGE | I/P-O/P:4242VDC/min | I/P-O/P:4242VDC/min Ta:25°C | I/P-O/P: 0.5 uA NO DAMAGE | P |
| 2 | ISOLATION RESISTANCE | I/P-O/P:500VDC>100MΩ | I/P-O/P:500VDC Ta:25°C | I/P-O/P: >100 MΩ NO DAMAGE | P |

E.M.C TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|------------|---|---|------------|---------|
| 1 | HARMONIC | IEC61000-3-2 CLASS A | I/P:230VAC / 50HZ O/P:FULL LOAD Ta:25°C | PASS | P |
| 2 | CONDUCTION | EN55022 CLASS B | I/P:230VAC (50HZ) O/P:FULL LOAD Ta:25°C | PASS | P |
| 3 | RADIATION | EN55022 CLASS B | I/P:230VAC (50HZ) O/P:FULL LOAD Ta:25°C | PASS | P |
| 4 | E.S.D | IEC61000-4-2 LIGHT INDUSTRY AIR:8KV / Contact:4KV | I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A | P |

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|---|--|--|---|------------|---|
| 5 | E.F.T | IEC61000-4-4 LIGHT INDUSTRY INPUT: 1KV | I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A | P |
| 6 | SURGE | IEC61000-4-5 LIGHT INDUSTRY L-N :1KV | I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A | P |
| 7 | Test by certified Lab Test Report Prepare | | | | P |

■ RELIABILITY TEST

ENVIRONMENT TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|------------------------------|---|--|-----------|---------|
| 1 | TEMPERATURE RISE TEST | 1. ROOM AMBIENT BURN-IN : 3HRS I/P:115VAC O/P:100% LOAD Ta=22.4°C 2. ROOM AMBIENT BURN-IN : 4HRS I/P:230VAC O/P:100% LOAD Ta=21.9°C 3. HIGH AMBIENT BURN-IN : 3HRS I/P:230VAC O/P:70% LOAD Ta=50.0°C | | | P |
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| 2 | LOW TEMPERATURE TURN ON TEST | TURN ON AFTER 2 HOURS | I/P : 230VAC O/P : 100% LOAD Ta= 0°C | TEST : OK | P |

OTHER

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|----------------------|--|----------------|--------|---------|
| 1 | CAPACITOR LIFE CYCLE | SUPPOSE C105 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=161112HRS I/P:230 VAC O/P:70% LOAD Ta=50°C LIFE TIME=36050HRS I/P:115 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=149285HRS | | | P |
| 2 | MTBF | MIL-HDBK-217F NOTICES2 STRESS ANALYSIS PREDICTION TOTAL FAILURE RATE: 1.43 M.T.B.F: 698912HRS | | | P |

| DATE | SAMPLE | TEST RESULT | TESTER | APPROVAL |
|------------|---------------------|-------------|-----------|----------|
| 2011.03.17 | STOCK R110218163 | PASS | T.K.CHENG | VINCENT |