**Test Report issued under the responsibility of:**

# TEST REPORT
# IEC 60950-1
# Information technology equipment - Safety - Part 1: General requirements

| | |
|---|---|
| **Report Reference No** ..... : | E468659-A1-CB-1 |
| Date of issue ..... : | 2014-09-23 |
| Total number of pages ..... : | 52 |
| **CB Testing Laboratory** ..... : | UL San Jose |
| Address ..... : | 455 E. Trimble Rd., San Jose, CA, 95131-1230, USA |
| **Applicant's name** ..... : | SILEGO TECHNOLOGY INC. |
| Address ..... : | 1515 WYATT DRIVE<br>SANTA CLARA, CA. 95054<br>USA |
| **Test specification:** | |
| Standard ..... : | IEC 60950-1:2005 (2nd Edition); Am 1:2009 |
| Test procedure ..... : | CB Scheme |
| Non-standard test method ..... : | N/A |
| **Test Report Form No.** ..... : | IEC60950_1C |
| Test Report Form originator ..... : | SGS Fimko Ltd |
| Master TRF ..... : | 2012-08 |



**This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.**

**General disclaimer**

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

| | |
|---|---|
| **Test item description** ..... : | Component IC Current Limiter |
| Trade Mark ..... : | SILEGO™ |
| Manufacturer ..... : | SILEGO TECHNOLOGY INC.<br>1515 WYATT DRIVE<br>SANTA CLARA, CA. 95054<br>USA |
| Model/Type reference ..... : | SLG55546, maybe followed by V or VTR |
| Ratings ..... : | Input Voltage:<br>4.5 Vdc to 5.5 Vdc<br><br>Output Continuous Rating:<br>0.2 A to 2.5 A<br><br>Output Current Limit:<br>0.3 A to 3.17 A<br><br>Ambient:<br>-40 to 85°C |

| **Testing procedure and testing location:** | | | |
|---|---|---|---|
| [x] | **CB Testing Laboratory** | | |
| | Testing location / address..... : | UL San Jose 455 E. Trimble Rd., San Jose, CA, 95131-1230, USA | |
| [ ] | **Associated CB Test Laboratory** | | |
| | Testing location / address..... : | | |
| | Tested by (name + signature) ..... : | Manish Gupta | |
| | Approved by (name + signature) ... : | Elicia Sosa | |
| [ ] | **Testing Procedure: TMP/CTF Stage 1** | | |
| | Tested by (name + signature) ..... : | | |
| | Approved by (+ signature) ..... : | | |
| | Testing location / address..... : | | |
| [ ] | **Testing Procedure: WMT/CTF Stage 2** | | |
| | Tested by (name + signature) ..... : | | |
| | Witnessed by (+ signature)..... : | | |
| | Approved by (+ signature) ..... : | | |
| | Testing location / address..... : | | |
| [ ] | **Testing Procedure: SMT/CTF Stage 3 or 4** | | |
| | Tested by (name + signature) ..... : | | |
| | Approved by (+ signature) ..... : | | |
| | Supervised by (+ signature) ..... : | | |
| | Testing location / address..... : | | |
| [ ] | **Testing Procedure: RMT** | | |
| | Tested by (name + signature) ..... : | | |
| | Approved by (+ signature) ..... : | | |
| | Supervised by (+ signature) ..... : | | |
| | Testing location / address..... : | | |

| **List of Attachments** |
|---|
| National Differences (41 pages) |
| Enclosures (6 pages) |
| **Summary Of Testing**<br>Unless otherwise indicated, all tests were conducted at UL San Jose 455 E. Trimble Rd., San Jose, CA, 95131-1230, USA. |

| **Tests performed (name of test and test clause)** | **Testing location / Comments** |
|---|---|

Limited Power Source Measurements (2.5)

Heating (4.5.1, 1.4.12, 1.4.13)

Abnormal Operation (5.3.1 - 5.3.9)

Evaluation of Intergrated Circuit (IC) Current Limiters (Annex CC)

**Summary of Compliance with National Differences:**

Countries outside the CB Scheme membership may also accept this report.

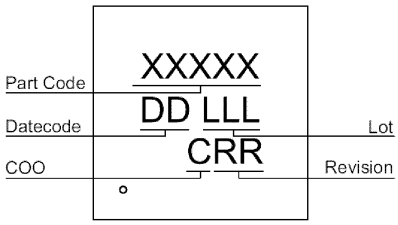
List of countries addressed: AT, BE, BG, BY, CA, CH, CN, CZ, DE, DK, ES, EU, FI, FR, GB, GR, HU, IE, IL, IT, JP, KR, NL, NO, PL, PT, RO, SE, SG, SI, SK, UA, US

The product fulfills the requirements of: IEC 60950-1:2005 (2nd Edition); Am 1:2009. EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011

**Copy of Marking Plate**

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

**Package Top Marking System Definition**




XXXXX - 5546V, which stands for SLG55546V
DD - Date Code Field: Coded date of manufacture
LLL - Lot Code: Designates Lot #
C - Assembly Site/COO: Specifies Assembly Site/Country of Origin
RR - Revision Code: Device Revision

| | |
|---|---|
| **Test item particulars :** | |
| Equipment mobility ..... : | component for building-in |
| Connection to the mains ..... : | not directly connected to the mains |
| Operating condition ..... : | continuous |
| Access location ..... : | operator accessible |
| Over voltage category (OVC) ..... : | OVC I |
| Mains supply tolerance (%) or absolute mains supply values ..... : | N/A |
| Tested for IT power systems ..... : | No |
| IT testing, phase-phase voltage (V) ..... : | N/A |
| Class of equipment ..... : | Class III (supplied by SELV) |
| Considered current rating of protective device as part of the building installation (A) ..... : | N/A |
| Pollution degree (PD) ..... : | PD 2 |
| IP protection class ..... : | IP X0 |
| Altitude of operation (m) ..... : | maximum 2000 m |
| Altitude of test laboratory (m) ..... : | less than 2000 m |
| Mass of equipment (kg) ..... : | maximum 0.1 kg (component for building-in) |
| **Possible test case verdicts:** | |
| - test case does not apply to the test object ..... : | N / A |
| - test object does meet the requirement ..... : | P(Pass) |
| - test object does not meet the requirement ..... : | F(Fail) |
| **Testing:** | |
| Date(s) of receipt of test item ..... : | 2014-09-02 |
| Date(s) of Performance of tests ..... : | 2014-09-05 to 2014-09-11 |

**General remarks:**

"(see Enclosure #)" refers to additional information appended to the report.
"(see appended table)" refers to a table appended to the report.

Throughout this report a point is used as the decimal separator.

**Manufacturer's Declaration per Sub Clause 4.2.5 of IECEE 02:** Yes

The application for obtaining a CB Test Certificate includes more than one factory and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided .....

When differences exist, they shall be identified in the General Product Information section.

**Name and address of Factory(ies):** GREATEK ELECTRONICS INC.
136 GUNG YI ROAD
CHUNAN CHENG, MIAOLI HSIEN
TAIWAN

ASE GROUP CHUNG-LI (ASE-CL)
550 CHUNG-HWA ROAD, SECTION 1
CHUNG-LI 320
TAIWAN, R.O.C.

**GENERAL PRODUCT INFORMATION:**

**Report Summary**

All applicable tests according to the referenced standard(s) have been carried out.

**Product Description**

The component power distribution switch (IC Current Limiter) limits the output current to within the specified output ratings. These devices provide current limiting and short-circuit protection when supplied by a power source (e.g., 250 VA) in accordance with those specified for LPS outputs in Table 2B. These devices are for use in SELV circuits only.

Enclosure Id. 3-01 (Overall View) shows the IC Current Limiter (U3) on the Evaluation Board. The test circuit of the Evaluation Board is shown in Enclosure Id. 7-01 (Annex CC (IC Current Limiter Testing Results).

**Model Differences**

N/A

**Additional Information**

Manufacturer's Specification Sheet is available per request from manufacturer.

MARKING: The Recognized Company, trade name, or trademark, catalog number, and Recognized Component Mark on the smallest package or reel. Electrical ratings, including voltage range, maximum continuous current, protective current and operating temperatures shall be provided on the manufacturer's device specific datasheet. The datasheet may be web-based provided it is publicly accessible on the internet. Marking provided represents other models.

The codes mentioned in the marking plate are etched on the IC Current Limiter (U3). See Enclosure Id. 3-01 (Overall View (IC Current Limiter (U3) on the Evaluation Board)) for details.

**Technical Considerations**

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 85°C
- The product was investigated to the following additional standards: EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 (which includes all European national differences, including those specified in this Test Report)

**Engineering Conditions of Acceptability**

When installed in an end-product, consideration must be given to the following:

- These devices are integrated circuit (packages) and the spacings within the device meet functional insulation. The ICs are intended for installation in SELV circuits only. 2. These devices are entirely electronic in nature and have no means for manual operation or reset. 3. The terminals of these

devices are for factory wiring only and intended to be mounted on a printed wiring board. 4. These devices have only been evaluated for supplementary overcurrent protection of secondary circuits supplied by the load side of a transformer or battery and have not been evaluated for branch-circuit protection. 5. These devices have been investigated as electronic overcurrent protective devices in accordance with the requirements contained in UL 2367 – the Standard for Solid State Overcurrent Protectors. As a result, use is permitted only on the load-side of an isolating transformer, power supply or battery with maximum levels. 6. Use on secondary supply circuits with a higher power capability requires additional evaluation for reliability, such as are contained in the Standard for Safety-Related Controls Employing Solid-State Controls, UL 991. 7. These devices have not been subjected tests for telecom applications and their suitability for connection to telecommunication networks with outside plant connections should be determined in the end product. 8. These devices were evaluated with respect to continuous current operation at the current levels shown in the electrical ratings section of this Test Report. 9. These devices have been subjected to environmental conditionings with respect to the following conditions (UL 2367): Shipping and Storage: -30°C to 70°C Temperature Range: -40°C to 85°C Thermal Cycling Endurance Abnormal 10. These devices have been evaluated for indoor and outdoor use. --

Abbreviations used in the report:

| | | | |
|---|---|---|---|
| - normal condition | N.C. | - single fault condition | S.F.C |
| - operational insulation | OP | - basic insulation | BI |
| - basic insulation between parts of opposite polarity: | BOP | - supplementary insulation | SI |
| - double insulation | DI | - reinforced insulation | RI |

Indicate used abbreviations (if any)