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Underwriters
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VP Engineering
HOLY STONE ENTERPRISE CO LTD
56 LANE 90 KUNG WU RD
WU LIN VILLAGE
LUNG TAN HSIANG
TAOYUAN HSIEN
325 TAIWAN

Date: 2010/09/21
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Subject: Procedure And/Or Report Material

The following material resulting from the investigation under the above numbers is enclosed.

Issue

<u>Date</u>	<u>Vol</u>	<u>Sec</u>	<u>Pages</u>	<u>Revised Date</u>
2010/04/01	XI	A1	Index Page(s) Revised Proc/Rpt Section	

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Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

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TPI File

UL INSPECTION CENTER 818

UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2007-03-27 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Information Technology Equipment Including Electrical Business Equipment
CCN:	NWQG2, NWQG8
Product:	TNV/SELV Isolation Capacitors for pb free materials.
Model:	SCC1808N***#302TG, SCC1808X***#302TG, SCC1812X***#302TG, SCC1808N***#502TG, SCC1812N***#502TG, SCC2208N***#602TG, SCC2211N***#602TG, SCC2220N***#602TG, SCC1808X***#502TG, SCC1812X***#502TG, SCC2208X***#502TG, SCC2211X***#502TG, SCC2220X***#502TG, SCC1808L***#302TG, SCC2220X***#202TG SCC1808N***#302TZ, SCC1808X***#302TZ, SCC1812X***#302TZ, SCC1808N***#502TZ SCC1812N***#502TZ, SCC2208N***#602TZ, SCC2211N***#602TZ, SCC2220N***#602TZ SCC1808X***#502TZ, SCC1812X***#502TZ, SCC2208X***#502TZ, SCC2211X***#502TZ SCC2220X***#502TZ, SCC1808L***#302TZ, SCC2220X***#202TZ SCC1808N***#302TX, SCC1808X***#302TX, SCC1812X***#302TX, SCC1808N***#502TX SCC1812N***#502TX, SCC2208N***#602TX, SCC2211N***#602TX, SCC2220N***#602TX SCC1808X***#502TX, SCC1812X***#502TX, SCC2208X***#502TX, SCC2211X***#502TX SCC2220X***#502TX, SCC1808L***#302TX, SCC2220X***#202TX SCC1808N***#302TS, SCC1808X***#302TS, SCC1812X***#302TS, SCC1808N***#502TS SCC1812N***#502TS, SCC2208N***#602TS, SCC2211N***#602TS, SCC2220N***#602TS SCC1808X***#502TS, SCC1812X***#502TS, SCC2208X***#502TS, SCC2211X***#502TS SCC2220X***#502TS, SCC1808L***#302TS, SCC2220X***#202TS, (***: Capacitance; #: Capacitance tolerance)
Rating:	Optional, 250 Vac, 2pF to 220pF for SCC1808N***#302TG; 150pF to 2200pF for SCC1808X***#302TG; 330pF to 4700pF for SCC1812X***#302TG; 2pF to 68pF for SCC1808N***#502TG; 2pF to 180pF for SCC1812N***#502TG; 2pF to 180pF for SCC2208N***#602TG;

2pF to 270pF for SCC2211N***#602TG;
2pF to 560pF for SCC2220N***#602TG;
150pF to 1000pF for SCC1808X***#502TG;
130pF to 1000pF for SCC1812X***#502TG;
36pF to 1000pF for SCC2208X***#502TG;
68pF to 2700pF for SCC2211X***#502TG;
100pF to 4700pF for SCC2220X***#502TG;
220pF to 1000pF for SCC1808L***#302TG;
150pF to 10000pF for SCC2220X***#202TG.

250Vac,
2pF to 220pF for SCC1808N***#302TZ & TX &TS;
150pF to 2200pF for SCC1808X***#302 TZ & TX &TS;
330pF to 4700pF for SCC1812X***#302 TZ & TX &TS;
2pF to 68pF for SCC1808N***#502TZ & TX &TS;
2pF to 180pF for SCC1812N***#502T TZ & TX &TS;
2pF to 180pF for SCC2208N***#602 TZ & TX &TS;
2pF to 270pF for SCC2211N***#602 TZ & TX &TS;
2pF to 560pF for SCC2220N***#602 TZ & TX &TS;
150pF to 1000pF for SCC1808X***#502 TZ & TX &TS;
130pF to 1000pF for SCC1812X***#502 TZ & TX &TS;
36pF to 1000pF for SCC2208X***#502 TZ & TX &TS;
68pF to 2700pF for SCC2211X***#502 TZ & TX &TS;
100pF to 4700pF for SCC2220X***#502 TZ & TX &TS;
220pF to 1000pF for SCC1808L***#302 TZ & TX &TS;
150pF to 10000pF for SCC2220X***#202 TZ & TX &TS;

Applicant Name and Address:

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This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of Underwriters Laboratories Inc. ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

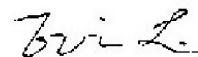
UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.

Issue Date: 2010-04-01 Page 3 of 8
2010-09-21

Report Reference # E229738-A1-UL

Prepared by: Eric Liu
Underwriters Laboratories Inc.



Reviewed by: Alex Lin
Underwriters Laboratories Inc.



Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization - The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions -
 - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
 - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
 - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

This product is a surface-mount TNV - SELV Isolation Capacitor component. It is intended for use on a printed wiring board within a suitable electrical, mechanical and fire enclosure. The product is not intended for direct connection to mains supply.

Model Differences

See enclosure 7-01 for detail.

Models of enclosure 7-05 are identical to Models of enclosure 7-01 except for Model designation.

Technical Considerations

- Equipment mobility : To be evaluated by End Product
- Connection to the mains : N/A
- Operating condition : continuous
- Access location : To be evaluated by End Product
- Over voltage category (OVC) : N/A (To be determined in the end-use equipment.)
- Mains supply tolerance (%) or absolute mains supply values : No direct connection
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Not classified
- Considered current rating (A) : To be evaluated by End Product
- Pollution degree (PD) : PD 2

- IP protection class : IP X0
- Altitude of operation (m) : 2000 m
- Altitude of test laboratory (m) : 2000 m
- Mass of equipment (kg) : 0.00011
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 25 degree C

Engineering Conditions of Acceptability

For use only in or with complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc. When installed in an end-product, consideration must be given to the following:

- The investigated Pollution Degree is: 2
- The following end-product enclosures are required: Mechanical, Fire, Electrical
- Steady-State Test was conducted at 1500 Vac (2121 Vdc).
- Creepages and Clearances were evaluated considering the maximum working TNV circuit voltages present as 120 Vrms.
- These capacitors were evaluated as Basic Insulation between TNV and SELV circuits only.

Additional Information

10CA46660 E229738-A1, Revision:
Adding Models, see enclosure/ misc. 7-05 for detail.

Markings and instructions

Clause Title	Marking or Instruction Details
Power rating - Company identification and Model, and Recognized marking for cUL	Marked on the smallest package.

Special Instructions to UL Representative

N/A

Production-Line Testing Requirements						
<u>Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.</u>						
Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
N/A	--	--	--	--	--	--
<u>Earthing Continuity Test Exemptions - This test is not required for the following models:</u>						
Refer to the Model information at the beginning of this Test Report.						
<u>Electric Strength Test Exemptions - This test is not required for the following models:</u>						
Refer to the Model information at the beginning of this Test Report.						
<u>Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:</u>						
--						
<u>Sample and Test Specifics for Follow-Up Tests at UL</u>						
Model	Component	Material	Test	Sample(s)	Test Specifics	
N/A	--	--	--	--	--	

TABLE: List of Critical Components

Object/part No.	Manufacturer/ trademark	type/model	technical data	CCN	Marks of Conformity
TNV/SELV Isolation Capacitors for pb free materials.	--	--	Optional, 250 Vac, each rated min. 2pF to 4700pF, See Enclosure 7-01 for detail.	--	--

Enclosures

<u>Type</u>	<u>Supplement Id</u>	<u>Description</u>
Photographs	3-01	SCC1808N***#302TG
Photographs	3-11	SCC1808X***#302TG
Photographs	3-12	SCC1812X***#302TG
Photographs	3-13	SCC1808N***#502TG
Photographs	3-14	SCC1812N***#502TG,
Photographs	3-15	SCC2208N***#602TG
Photographs	3-16	SCC2211N***#602TG,
Photographs	3-17	SCC2220N***#602TG
Photographs	3-18	SCC1808X***#502TG,
Photographs	3-19	SCC1812X***#502TG,
Photographs	3-20	SCC2208X***#502TG,
Photographs	3-21	SCC2211X***#502TG
Photographs	3-22	SCC2220X***#502TG
Photographs	3-23	SCC1808L***#302TG
Photographs	3-24	SCC2220X***#202TG
Diagrams		
Schematics + PWB		
Manuals		
Miscellaneous	7-01	Model different and Construction for Safety Capacitor
Miscellaneous	7-05	Model difference