

Recognized Component Marking Data Page (RCMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

RECOGNIZED COMPONENT MARKING

Products Recognized under UL's Component Recognition Service are identified by marking elements consisting of:

1. The Recognized Company's identification specified in this document.
2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
3. The UL Recognized Component Mark shown below.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

RECOGNIZED COMPONENT MARK



Minimum size of the Recognized Component Mark is not specified as long as it is legible. Minimum height of the registered symbol ® shall be 3/64 inch but may be omitted if it is out of proportion to the Recognized Component Mark or not legible to the naked eye.

The manufacturer may reproduce the Mark electronically. Any decision regarding the acceptability of the manufacturer's Mark reproduction will be made at the Reviewing Office.

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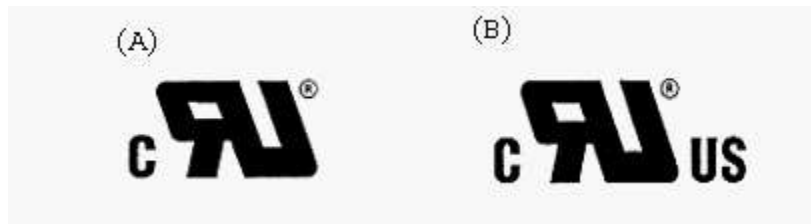
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2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
3. The UL Recognized Component Mark shown below:
 - (A) Recognized only to Canadian safety requirements, or;
 - (B) Recognized to both U.S. and Canadian safety requirements.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

Recognized Component Mark



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Models	Section	Requirements Evaluated to (US and/or CN)
Single Protection Non-Optical Isolator, Models NCI*92XX, NCI*93XX, NCI*94XX, NCI*95XX, NCI*96XX, where * is D or V, XX is 00-99. Maybe followed by any alphanumeric characters or blank.	1	US/CN

MANUFACTURING AND PRODUCTION LINE TESTS

TEST TO BE CONDUCTED BY MANUFACTURER:

Dielectric Voltage-Withstand Test -

Each optical isolator shall withstand, as a routine production-line test, the application of a potential between the input and output terminals. For an optical isolator having an ac isolation voltage rating, the frequency of the applied potential shall be 40 - 70 Hz. A dc test potential shall be applied for an optical isolator having a dc rated dielectric insulation voltage. A dc potential equal to 1.414 times the specified 40 - 70 Hz potential may be used if an ac rated optical isolator has solid state components that may be damaged by an ac potential.

The production-line test potential shall be the rated dielectric insulation voltage for 60 seconds or 120 percent of the rated dielectric insulation voltage for one second.

The product may be in a heated or unheated condition for the test.

TEST EQUIPMENT PROVIDED BY MANUFACTURER:

The test equipment for conducting the dielectric voltage-withstand test is to have the following features and characteristics:

- a) A means of indicating the test potential, in volts rms,
- b) A 40 - 70 Hz test potential that has:
 - 1) A sinusoidal waveform, and
 - 2) A peak value of the waveform that is not to be less than 1.3 and not more than 1.5 times the root-mean-square value.
- c) An automatic reject feature that rejects any unacceptable unit or an audible or visual indicator of electrical breakdown. If the indicator of breakdown is audible or visual, the indicator is to remain active until the test equipment is reset manually.

If the output of the test-equipment is less than 500 VA, the equipment is to include a voltmeter in the output circuit to indicate the test potential directly.

If the output of the test-equipment is 500 VA or larger, the test potential may be indicated:

- a) By a voltmeter in the primary circuit or in a tertiary-winding circuit,
- b) By a selector switch marked to indicate the test potential, or
- c) In the case of test equipment that has a single output potential, by a marking in a readily visible location to indicate the test potential. When marking is used without an indicating voltmeter, the equipment is to include a positive means, such as an indicator lamp, to indicate that the manual-reset switch actually resets following a dielectric breakdown.

Test equipment other than that described above may be used if found acceptable to accomplish the intended factory control.

G E N E R A LPRODUCT COVERED:

Component - Non Optical Isolators.

MARKING:

USR - Recognized company name or trademark, model designation, and the



Recognized Component Mark , provided on each unit or the smallest shipping carton.

CNR - Recognized company name or trademark, model designation, and the



Recognized Component Mark for Canada , provided on each unit or the smallest shipping carton.

TRADE NAME/TRADEMARK:



The following trade name or trademark, " " if any, may be used in lieu of the company name to identify Recognized Components covered by this procedure.

Note: Company Trademark can be located Above or Before the "Designation Type".

RATINGS:

Specification Sheet - The rating information specified below shall appear in the manufacturer's specifications for the product and may be expressed in a tabular or graphic format:

1. Maximum continuous power, a current, and voltage rating for both the photo-emitter and the photo-sensor circuits.
2. A dielectric isolation-voltage rating between input and output terminals, specified in volts rms, or dc, as applicable.
3. The maximum operating ambient temperature, maximum junction temperature, and maximum storage temperature.
4. Derating specifications related to ambient temperatures.

GENERAL CONSTRUCTION:

Corrosion Protection - All ferrous parts are of corrosion resistant material or are plated or painted as corrosion protection.

CERTIFICATE OF COMPLIANCE

Certificate Number E513964
Report Reference E513964-20200313
Issue Date 2020-MARCH-16

Issued to: ON Semiconductor (Fairchild Semiconductor Pte. Ltd.)
10 Ang Mo Kio Street 65, 03-06 Techpoint
Singapore 569059 SINGAPORE

**This certificate confirms that
representative samples of**

COMPONENT - NONOPTICAL ISOLATING DEVICES
Single Protection Non-Optical Isolator, Models NCI*92XX,
NCI*93XX, NCI*94XX, NCI*95XX, NCI*96XX, where * is D
or V, XX is 00-99. Maybe followed by any alphanumeric
characters or blank.

Have been investigated by UL in accordance with the
component requirements in the Standard(s) indicated on
this Certificate. UL Recognized components are incomplete
in certain constructional features or restricted in
performance capabilities and are intended for installation in
complete equipment submitted for investigation to UL LLC.


Standard(s) for Safety: UL 1577-Standard for Optical Isolators
CSA Component Acceptance Service No. 5A.

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only
the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified
and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



File E513964
Project 4789374021

March 13, 2020

REPORT

on

COMPONENT - NON OPTICAL ISOLATING DEVICES Equipment

ON Semiconductor

Singapore

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Single Protection Non-Optical Isolator, Models NCI*92XX, NCI*93XX, NCI*94XX, NCI*95XX, NCI*96XX, where * is D or V, XX is 00-99. Maybe followed by any alphanumeric characters or blank.

MAXIMUM RATINGS PER CHANNEL (at 25°C ambient) (\$):

Model	Current (mA)		Power (mW)		Isolation Voltage (Vrms)	Max Operating Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)	Max Data Rate, Mbps
	Transmitter	Receiver	Transmitter	Receiver					
NCI*92XX	60	60	350	350	5000	125	150	150	100
NCI*93XX	60	60	350	350	5000	125	150	150	12.5
NCI*94XX	60	60	350	350	5000	125	150	150	12.5
NCI*95XX	60	60	350	350	5000	125	150	150	12.5
NCI*96XX	60	60	350	350	5000	125	150	150	12.5

GENERAL:

These non-optical isolator devices consist of a transmitter coupled to a receiver. The transmitter and receiver are separated by an insulating barrier.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

USR indicates this product was investigated under the UL Standard for Safety for Optical Isolators, UL 1577, Fifth Edition.

CNR indicates this product was investigated under the Canadian Certification Notice, CSA Component Acceptance Service No. 5A.