## CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference

20150127-E181974 E181974-20080425 2015-JANUARY-27

Issued to:

**Issue Date** 

Texas Instruments Tucson Corp

5411 E Williams Blvd Tucson AZ 85711-4493

This is to certify that representative samples of

COMPONENT - NONOPTICAL ISOLATING DEVICES Single Protection Non-Optical Isolators, Models ISO15, ISO35, ISO1176, ISO3080, ISO3082, ISO3086, ISO3088,

may be followed by any suffix except T.

Single Protection Non-Optical Isolators, Models ISO35T, ISO1176T, ISO3086T, may be followed by any suffix.

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: Sta

Standard for Optical Isolators, UL 1577.

CSA Component Acceptance Service No. 5A.

**Additional Information:** 

See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.

Barrelly

Bruce Mahrenholz, Assistant Chief Engineer, Global Inspection and Field Services

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, pleas contact a local UL Customer Service Representative at <a href="https://www.ul.com/contactus">www.ul.com/contactus</a>



# File E181974 Project 08SC02111

April 25, 2008

REPORT

on

COMPONENT - NON-OPTICAL ISOLATING DEVICES

Texas Instruments, Tucson Corp.
Tucson, Arizona 85706

Copyright © 2008 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above named company to reproduce this Report provided it is in its entirety.

Underwriters Laboratories Inc. authorizes the above named company to reproduce the latest pages of that portion of this Report consisting of this Cover Page through Page 2.

File E181974 Vol. 4 Sec. 2 Page 1 Issued: 2008-04-25 and Report Revised: 2012-03-14

#### DESCRIPTION

#### PRODUCT COVERED:

\*USR - Single Protection Non-Optical Isolators, Models ISO15, ISO35, ISO1176, ISO3080, ISO3082, ISO3086, ISO3088, may be followed by any suffix except T.

USR, CNR - Single Protection Non-Optical Isolators, Models ISO35T, ISO1176T, ISO3086T, may be followed by any suffix.

ELECTRICAL RATINGS (at nominal operating temperature):

	Current (mA)		Power (mW)			Max	Data	Max	Max	Max
Model			ļ		Isolation	Operati	Transmi	Case	Junct	Storag
					Voltage	ng	ssion	Temp	ion	е
					V ac/dc	Temp	Speed	(°C)	Temp	Temp
						(°C)	(Mbps)		(°C)	(°C)
	Encoder	Decoder	Encoder	Decoder						
	(Emitter)	(Sensor)	(Emitter)	(Sensor)						
T C O 1 F	10 / 1	11		4.0	0500 77	105		1.45	150	1.00
ISO15	10 / 1	11	55	40	2500 Vac 4000Vdc	125	=	147	150	170
							=			
ISO35	10 / 1	11	55	40	2500Vac	125	-	147	150	170
					4000Vdc					
ISO35T	8.5	95	30.6	342	2500 Vac	85	1	-	170	150
ISO1176	10 / 40	17	55	94	2500Vac	125	-	145	150	170
					4000Vdc					
ISO1176 T	20	116	110	609	2500 Vac	85	40	=	170	150
ISO3080	10 / 0.2	17	55	94	2500Vac	125	-	145	150	170
					4000Vdc					
ISO3082	10 / 0.2	17	55	94	2500Vac	125	_	145	150	170
					4000Vdc					
ISO3086	10 / 20	17	55	94	2500Vac	125	-	145	150	170
					4000Vdc					
ISO3086 T	14	75	77	413	2500 Vac	85	20	-	170	150
ISO3088	10 / 20	17	55	94	2500Vac	125	=	145	150	170
					4000Vdc					

File E181974 Vol. 4 Sec. 2 Page 2 Issued: 2008-04-25 and Report Revised: 2012-03-14

#### 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, Fourth Edition.

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

#### Conditions of Acceptability -

- The capability of the device to control a load has not been investigated.
- 2. These devices should be installed in a suitable end product enclosure.
- 3. The maximum operating (ambient) temperature, as noted in the ratings table, shall not be exceeded. See ILL. 1 for derating curves.
- \*4. For single protection devices, the insulation to the case has not been evaluated.

\*

5. The maximum case temperature shall not be exceeded, as noted in the ratings table.

### IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2022, Texas Instruments Incorporated