Certificate Number UL-US-L181974-14-61307002-3

Report Reference E181974-20070316

Date 30-Mar-2022

Issued to: Texas Instruments Incorporated

12500 TI BLVD DALLAS, TX 75243

United States

This is to certify that representative samples of

FPPT2 - Nonoptical Isolating Devices - Component See Addendum Page for Product Designation(s).

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, 5th Ed, Issue Date: 2014-04-25, Revision Date:

2019-06-11

Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information

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Look for the UL Recognized Component Mark on the product.





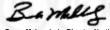
Certificate Number UL-US-L181974-14-61307002-3

Report Reference E181974-20070316 Date

30-Mar-2022

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description				
AMC1100*	Single protection non-optical isolators at				
vita vita vita vita vita vita vita vi	4250 Vdc/3005 Vac isolation voltage				
AMC1106x@	Single protection non-optical isolators at				
	4000 Vdc/2500 Vac isolation voltage				
AMC1200B*	Single protection non-optical isolators at				
	4250 Vdc/3005 Vac isolation voltage				
AMC1200P*	Single protection non-optical isolators at				
~~~~~	4250 Vdc/3005 Vac isolation voltage				
AMC1200Q1*	Single protection non-optical isolators at				
\\````LJ\\```LJ\\```LJ\\```LJ\\``\LJ\\\	4250 Vdc/3005 Vac isolation voltage				
AMC1200S*	Single protection non-optical isolators at				
$f_{11} > f_{12} > f_{13} > f_{13} > f_{14} > f$	4250 Vdc/3005 Vac isolation voltage				
AMC1200XXXX, where X may be followed by any	Single protection non-optical isolators at				
additional letters except for B, P, Q, or S in the first digit.	4000 Vdc/2500 Vac isolation voltage				
AMC1202	Single protection non-optical isolators at				
ZII: AZII: AZII: AZII: AZII: AZII: AZ	3000 Vac isolation voltage				
AMC1203@	Single protection non-optical isolators at				
	4000 Vdc/2500 Vac isolation voltage				
AMC1203B@	Single protection non-optical isolators at				
(: U)	4000 Vdc/2500 Vac isolation voltage				
AMC1204B*	Single protection non-optical isolators at				
	4250 Vdc/3005 Vac isolation voltage				
AMC1204Q*	Single protection non-optical isolators at				
	4250 Vdc/3005 Vac isolation voltage				
AMC1204XXXX,, where X may be followed by any	Single protection non-optical isolators at				
additional letters except for B, P, Q, or S in the first digit.	4000 Vdc/2500 Vac isolation voltage				
AMC1211*	Single protection non-optical isolators at				
	4000 Vdc/2500 Vac isolation voltage				
AMC1211Q*	Single protection non-optical isolators at				
MISMISMISMISMISMISMISM	4000 Vdc/2500 Vac isolation voltage				
AMC22C10, may be followed by any additional letters	Single protection non-optical isolators at				
and/or numbers	3000 Vac isolation voltage				
AMC22C11, may be followed by any additional letters	Single protection non-optical isolators at				
and/or numbers	3000 Vac isolation voltage				
AMC22C12, may be followed by any additional letters	Single protection non-optical isolators at				
and/or numbers	3000 Vac isolation voltage				
AMC22C14, may be followed by any additional letters	Single protection non-optical isolators at				
and/or numbers	3000 Vac isolation voltage				





Certificate Number UL-US-L181974-14-61307002-3

Report Reference E181974-20070316

**Date** 30-Mar-2022

ISO7220A@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7220B@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7220C@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7220M@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7221A@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7221B@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7221C@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7221HC@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7221M@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7230A@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7230C@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7230M@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7231A@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7231C@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7231M@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7240A@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7240C@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7240CF@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7240M@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7241A@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7241C@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7241M@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7242A@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage



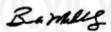
Bruce Mahrenholz, Director North American Certification Program

Certificate Number UL-US-L181974-14-61307002-3

**Report Reference** E181974-20070316

Date 30-Mar-2022

ISO7242C@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
ISO7242M@	Single protection non-optical isolators at 4000 Vdc/2500 Vac isolation voltage
SN2004048	Single protection non-optical isolators at 4250 Vdc/3005 Vac isolation voltage
TLA7001	Single protection non-optical isolators at 3000 Vac isolation voltage



Bruce Mahrenholz, Director North American Certification Program

UL LLC



Certificate Number UL-CA-L181974-24-61307002-2

**Report Reference** E181974-20070316

Date 30-Mar-2022

Issued to: Texas Instruments Incorporated

12500 TI BLVD DALLAS, TX 75243

**United States** 

This is to certify that representative samples of

FPPT8 - Nonoptical Isolating Devices Certified for Canada -

Component

See Addendum Page for Product Designation(s).

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: CSA Component Acceptance Service Notice No. 5A, Issue

Date: 1998-01-23

Additional Information: See the UL Online Certifications Directory at

https://ig.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.





Certificate Number UL-CA-L181974-24-61307002-2

**Report Reference** E181974-20070316

Date 30-Mar-2022

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description			
AMC1211*	Single protection non-optical isolators at			
MESARISANISANISANISANI	4000 Vdc/2500 Vac isolation voltage			
AMC1211Q*	Single protection non-optical isolators at			
$\vee$ $\vee$ $\vee$ $\vee$ $\vee$ $\vee$ $\vee$	4000 Vdc/2500 Vac isolation voltage			
AMC22C10, may be followed by any additional letters	Single protection non-optical isolators at			
and/or numbers	3000 Vac isolation voltage			
AMC22C11, may be followed by any additional letters	Single protection non-optical isolators at			
and/or numbers	3000 Vac isolation voltage			
AMC22C12, may be followed by any additional letters	Single protection non-optical isolators at			
and/or numbers	3000 Vac isolation voltage			
AMC22C14, may be followed by any additional letters	Single protection non-optical isolators at			
and/or numbers	3000 Vac isolation voltage			



Bruce Mahrenholz, Director North American Certification Program

UL LLC



File E181974 Project 07CA02022

March 16, 2007

REPORT

on

COMPONENT - NON-OPTICAL ISOLATING DEVICES

Texas Instruments Tucson Corp TUCSON AZ 85706

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File E181974 Vol. 4 Sec. 1 Page 1 Issued: 2007-03-16 and Report Revised: 2022-03-23

#### DESCRIPTION

#### PRODUCT COVERED:

USR - Single Protection Non-Optical Isolators, Models:

 ${\tt AMC1200XXXX}$  and  ${\tt AMC1204XXXX},$  where X may be any additional letters except for B, P, Q or S in the first digit.

AMC1100, AMC1106x, AMC1200B, AMC1200P, AMC1200Q1, AMC1200S, AMC1202, AMC1203, AMC1203B, AMC1204B, AMC1204Q, SN2004048, TLA7001, may be followed by any additional letters and/or numbers.

ISO7220A, ISO7220B, ISO7220C, ISO7220M, ISO7221A, ISO7221B, ISO7221C, ISO7221HC, ISO7221M, ISO7230A, ISO7230C, ISO7230M, ISO7231A, ISO7231C, ISO7231M, ISO7240A, ISO7240C, ISO7240CF, ISO7240M, ISO7241A, ISO7241C, ISO7241M, ISO7242A, ISO7242C, ISO7242M, may be followed by additional letters and/or numbers.

USR, CNR - Single Protection Non-Optical Isolators, Models:

*AMC1211, AMC1211Q, AMC22C10, AMC22C11, AMC22C14 may be followed by any additional letters and/or numbers.

ELECTRICAL RATINGS (at nominal operating temperature):

	~	ICAL RATINGS (at nominal operating							
Model	Curren	, ,	Power		Isolation	Max	Max	Max	Max Data
	Encoder	Decoder	Encoder	Decoder	Voltage	Operating Temp(°C)	Storage Temp(°C)	Junction Temp(°C)	Trans- mission
AMC1100	8	10	44	55	3005 Vac, 4250 Vdc	125	150	150	-
AMC1106x	8.2	5.5	45.1	30.25	2500Vac 4000Vdc	125	150	150	-
AMC1200	8	10	44	55	2500 Vac 4000 Vdc	125	150	150	
AMC1200B	8	10	44	55	3005 Vac 4250 Vdc	125	150	150	-
AMC1200P	8	10	44	55	3005 Vac 4250 Vdc	125	150	150	-
AMC1200Q1	8	10	44	55	3005 Vac 4250 Vdc	125	150	150	-
AMC1200S	8	10	44	55	3005 Vac 4250 Vdc	125	150	150	-
AMC1202	9.8	8.1	54	45	3000 Vac	125	150	150	-
AMC1203	8	12	44	66	2500 Vac 4000 Vdc	125	150	150	@20 Mbps
AMC1203B	8	12	44	66	2500 Vac 4000 Vdc	125	150	150	020 Mbps
AMC1204	22	10	121	55	2500 Vac 4000 Vdc	125	150	150	20 Mbps
AMC1204B	22	10	121	55	3005 Vac 4250 Vdc	125	150	150	20 Mbps
AMC1204Q	22	10	121	55	3005 Vac 4250 Vdc	125	150	150	20 Mbps
AMC1211	9.3	7.0	53.9	38.5	2500Vac/ 4000Vdc	125	150	150	-
AMC1211Q	9.3	7.0	53.9	38.5	2500Vac/ 4000Vdc	125	150	150	-
AMC22C10	3.3	2.2	83	12	3000 Vac	125	150	150	-
AMC22C11	3.3	2.2	83	12	3000 Vac	125	150	150	-
AMC22C12	3.6	2.2	90	12	3000 Vac	125	150	150	-
AMC22C14	3.9	2.2	98	12	3000 Vac	125	150	150	_
ISO7220A	20	50	110	275	2500 Vac 4000 Vdc	125	150	150	1 Mbps
ISO7220B	20	50	110	275	2500 Vac 4000 Vdc	125	150	150	5 Mbps
ISO7220C	20	50	110	275	2500 Vac 4000 Vdc	125	150	150	25 Mbps
ISO7220M	20	50	110	275	2500 Vac 4000 Vdc	125	150	150	150 Mbps
ISO7221A	35	35	193	193	2500 Vac 4000 Vdc	125	150	150	1 Mbps
ISO7221B	35	35	193	193	2500 Vac 4000 Vdc	125	150	150	5 Mbps
ISO7221C	35	35	193	193	2500 Vac 4000 Vdc	125	150	150	25 Mbps
*									

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ELECTRICAL RATINGS CONT. (at nominal operating temperature):

	1		NGS CONT. (at nominal operating							
Model	Curren	, ,	Power (mW)		Isolation	Max	Max	Max	Max Data	
	Encoder	Decoder	Encoder	Decoder	Voltage	Operating	Storage	Junction	Trans-	
						Temp(°C)	Temp(°C)	Temp(°C)	mission	
T007001#0	25	25	100	100	2500 Vac	175	175	100	05.15	
ISO7221HC	35	35	193	193	4000 Vdc	175	175	180	25 Mbps	
ISO7221M	35	35	193	193	2500 Vac 4000 Vdc	125	150	150	150 Mbps	
70070203	0.0	10	10	105	2500 Vac	105	150	150	1 10	
ISO7230A	2.3	19	13	105	4000 Vdc	125	150	150	1 Mbps	
ISO7230C	2.3	19	13	105	2500 Vac 4000 Vdc	125	150	150	25 Mbps	
ISO7230M	2.3	19	13	105	2500 Vac 4000 Vdc	125	150	150	150 Mbps	
					2500 Vac					
ISO7231A	10	17	55	94	4000 Vdc	125	150	150	1 Mbps	
IS07231C	10	17	55	94	2500 Vac	125	150	150	25 Mbps	
15072510	10	17	33	24	4000 Vdc	123	130	150	25 Mbps	
ISO7231M	10	17	55	94	2500 Vac 4000 Vdc	125	150	150	150 Mbps	
					2500 Vac					
ISO7240A	2.3	19	13	105	4000 Vdc	125	150	150	1 Mbps	
T0070400	0.0	1.0	1.0	105	2500 Vac	105	1.50	150	05.34	
ISO7240C	2.3	19	13	105	4000 Vdc	125	150	150	25 Mbps	
ISO7240CF	2.3	19	13	105	2500 Vac	125	150	150	25 Mbps	
130724001	2.5	19	13	100	4000 Vdc	123	130	130	23 Mbps	
ISO7240M	2.3	19	13	105	2500 Vac	125	150	150	150 Mbps	
100721011	2.0	17	13	100	4000 Vdc	123	100	100	100 11000	
ISO7241A	10	17	55	94	2500 Vac	125	150	150	1 Mbps	
					4000 Vdc				-	
ISO7241C	10	17	55	94	2500 Vac 4000 Vdc	125	150	150	25 Mbps	
					2500 Vac					
ISO7241M	10	17	55	94	4000 Vdc	125	150	150	150 Mbps	
					2500 Vac					
ISO7242A	13	13	72	72	4000 Vdc	125	150	150	1 Mbps	
T0070400	1.2	1.0	7.0	7.0	2500 Vac	105	1.50	150	0.5. Mil.	
ISO7242C	13	13	72	72	4000 Vdc	125	150	150	25 Mbps	
ISO7242M	13	13	72	72	2500 Vac	125	150	150	150 Mbps	
130/242M	10	Τ.)	12	12	4000 Vdc	123	100	100	TOO MUDS	
SN2004048	8	10	44	55	3005 Vac,	125	150	150	_	
					4250 Vdc					
TLA7001	8	10	44	55	3000	125	150	150	_	

*

### 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, revised June 11, 2019.

CNR indicates this product was investigated under the Canadian Certification Notice, CSA Component Acceptance Service No. 5A, dated January 23, 1998.

For Engineering Use Only - See ILL. 1-4 for a functional diagram and lead pin configuration.

### Conditions of Acceptability -

- 1. 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 temperature on the case should not exceed the maximum operating temperature rating specified in the ratings table.
- 4. For single protection devices, the insulation to the case has not been evaluated. For double protection devices, the insulation to the case has been evaluated to the isolation voltage specified in the ratings table.

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