Safety Standard Certified Ceramic Capacitors (安全規格認定セラミックコンデンサ)

Type EA

X1: 440 Vac(r.m.s.) Y1: 250 Vac(r.m.s.) X1Y1: 1500Vdc(UL)

Certification Body (認証機関)	Standard No. (規格番号)	Certificate No.* (認定番号)	Expiration date (有効期限)	Attached Page No. (添付ページ番号)
ENEC (SEMKO)	EN60384-14	SE-ENEC-2401372	2030-01-09	g - 1
UL/cUL	UL60384-14/CSA E60384-14	E37921	No expiration date (有効期限無し)	g - 2
CQC	IEC60384-14	CQC16001142384	No expiration date (有効期限無し)	g - 3
KTC	KC60384-14	HU03008-16007	No expiration date (有効期限無し)	g - 4

^{*} Above Certified No. may be changed on account of the revision of standards and the renewal of certification.

Murata Mfg. Co.,Ltd.

株式会社 村田製作所

^{(*} 認定番号は規格番号の改訂、取得範囲の変更により変わることがあります。)



LICENCE FOR



ENEC LICENCE REF NO. SE-ENEC-2401372

Capacitor for radio interference suppression

Type Designation: EA

Licence Holder: Murata Mfg. Co. Ltd.

10-1 Higashikotari 1-chome

Nagaokakyo-shi Kyoto-fu 617-8555

Japan

The product complies with the EN IEC 60384-14:2023

standard(s):

Licence holder is authorized to -

use the mark with the following limitations:

Date of expiry: 9 January, 2030

Additional information in Appendix

Certification Body: Intertek Semko AB, Product Certification Place: Kista - Stockholm

Signed: Date: 9 January, 2025

Anneli Averland Johansson

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. This certificate is not issued under accreditation, by a non-approved body.

Intertek Semko AB Page 1 of 3 EMG



APPENDIX: ENEC LICENCE REF NO.SE-ENEC-2401372

Test Report No. 2404541STO-001, 2404541STO-002, 2404541STO-003, 2404541STO-004

Technical Data:

Type designation EA

Rated voltage (V) 250/300V Y1, 440V X1 Input 10-2200pF +-10%, +-20%

Class Y1/X1 Trademark M

Product information 40/125/21/C. SMD.

Ceramic material SL, B, E and F.

Nominal	Ceramic	Capacitance	
capacitance	material	tolerance	
(pF)	group	(%)	
10			
22	SL	±10%	
47			
100			
220		±10%	
330	В		
470			
680			
1000	E		
1500		±20%	
2200	F		

This certificate replaces previously issued ref. No. SE-ENEC-2300151 dated 10 February 2023. A new certificate has been issued due to updated standard.

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. This certificate is not issued under accreditation, by a non-approved body.

Intertek Semko AB Page 2 of 3 EMG



Page 3 of 3 EMG

Manufacturing Sites: Murata Electronics (Thailand) Ltd.

Northern Region Industrial Estate 63 Moo 4 Tambol Ban-Klang

Amphur Muang Lamphun 51000, Thailand

Certification Body: Intertek Semko AB, Product Certification Place: Kista - Stockholm

Signed: Date: 9 January, 2025

Anneli Averland Johansson

Intertek Semko AB

UL Product iQ®



Fixed Capacitors for Use in Electronic Equipment - Component

COMPANY

MURATA MFG CO LTD

COMPONENT BUSINESS UNIT 1-10-1 HIGASIKOTARI NAGAOKAKYO-SHI, Kyoto 617-8555 Japan

E37921

Marking: Company name or trademark , and model designation.

Note: For additional marking information, refer to the Guide Information Page.

View model for additional information

Class X1 and Class Y2 Capacitors, Model(s): <u>KJ</u> may be followed by M for +/-20%, K for +/-10%.

Class X1/Y1 Capacitors, Model(s): <u>EA</u> may be followed by K ($\pm 10\%$) (for $10\sim47$ pF), K ($\pm 10\%$) or M ($\pm 20\%$) (for $100\sim680$ pF), M ($\pm 20\%$) (for $1000\sim2200$ pF).

Class X1/Y1 Capacitors, Model(s): \underline{KL} may be followed by J (\pm 5%), K (\pm 10%) or M (\pm 20%) for capacitance tolerance.

Class X1/Y1 Capacitors, Model(s): \underline{RA} may be followed by J ($\pm 5\%$), K ($\pm 10\%$) or M ($\pm 20\%$) for capacitance tolerance.

Class X1/Y1 Capacitors, Model(s): RB may be followed by K (±10%) or M (±20%) for capacitance tolerance.

Class X1/Y1 Capacitors, Ceramic Disk Type, Model(s): KX may be followed by J for +/-5%. K for +/-10%. M for +/-20%.

Class X1/Y2 Capacitors, Model(s): $\overline{\text{TF}}$ may be followed by K (±10%).

Class X1/Y2 Capacitors, Model(s): <u>SA</u> may be followed by J (\pm 5%), K (\pm 10%) or M (\pm 20%) for capacitance tolerance.

Class X1/Y2 Capacitors, Ceramic Disk Type, Model(s): KH may be followed by K for +/-10%. M for +/-20%.

Class X1/Y2 Capacitors, Ceramic Disk Type, Model(s): <u>KY</u> may be followed by J for +/-5%. K for +/-10%. M for +/-20%.

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): <u>GF series for type GA342</u> may be followed by J (\pm 5%) (for $10\sim82$ pF), K (\pm 10%) (for $100\sim4700$ pF).

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): <u>GF series for type GA352, GA355</u> may be followed by J (\pm 5%) (for $10\sim82$ pF), K (\pm 10%) (for $100\sim4700$ pF).

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): $\underline{\text{MF}}$ may be followed by K ($\pm 10\%$) (for $100 \sim 4700 \text{pF}$), M($\pm 20\%$) (for $5600 \sim 10000 \text{pF}$).

Class X2 Capacitors, Model(s): <u>GB+GA35****GB****W*** (* may be space, 0 to 9, A to Z)</u> with Capacitances of 10000, 15000, 22000, 33000, 47000, or 56000 pF with tolerance K.

<u>Last Updated</u> on 2024-04-27

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL Solutions' Follow - Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL Solutions' Follow - Up Service. Always look for the Mark on the product.

UL Solutions permits the reproduction of the material contained in Product iQ subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from Product iQ with permission from UL Solutions" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "©2024 UL LLC."

UL Product iQ®



Fixed Capacitors for Use in Electronic Equipment Certified for Canada - Component

COMPANY

MURATA MFG CO LTD

COMPONENT BUSINESS UNIT 1-10-1 HIGASIKOTARI NAGAOKAKYO-SHI, Kyoto 617-8555 Japan

E37921

Marking: Company name or trademark , model designation, and the Recognized Component Mark for Canada c Note: For additional marking information, refer to the <u>Guide Information Page</u>.

View model for additional information

Class X1 and Class Y2 Capacitors, Model(s): KJ may be followed by M for +/-20%, K for +/-10%.

Class X1/Y1 Capacitors, Model(s): <u>EA</u> may be followed by K ($\pm 10\%$) (for $10\sim47$ pF), K ($\pm 10\%$) or M ($\pm 20\%$) (for $100\sim680$ pF), M ($\pm 20\%$) (for $1000\sim2200$ pF).

Class X1/Y1 Capacitors, Model(s): RA may be followed by J (±5%), K (±10%) or M (±20%) for capacitance tolerance.

Class X1/Y1 Capacitors, Model(s): RB may be followed by K (±10%) or M (±20%) for capacitance tolerance.

Class X1/Y2 Capacitors, Model(s): $\overline{\text{TF}}$ may be followed by K (±10%).

Class X1/Y2 Capacitors, Model(s): \underline{SA} may be followed by J ($\pm 5\%$), K ($\pm 10\%$) or M ($\pm 20\%$) for capacitance tolerance.

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): <u>GF series for type GA342</u> may be followed by J (\pm 5%) (for $10\sim82$ pF), K (\pm 10%) (for $100\sim4700$ pF).

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): <u>GF series for type GA352, GA355</u> may be followed by J (\pm 5%) (for $10\sim82$ pF), K (\pm 10%) (for $100\sim4700$ pF).

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): $\underline{\text{MF}}$ may be followed by K ($\pm 10\%$) (for $100 \sim 4700 \text{pF}$), M($\pm 20\%$) (for $5600 \sim 10000 \text{pF}$).

Last Updated on 2024-04-27

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL Solutions' Follow - Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL Solutions' Follow - Up Service. Always look for the Mark on the product.

UL Solutions permits the reproduction of the material contained in Product iQ subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from Product iQ with permission from UL Solutions" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "©2024 UL LLC."

UL Product iQ®

UL Solutions

Model EA

File Number: E37921

COMPANY

MURATA MFG CO LTD

COMPONENT BUSINESS UNIT 1-10-1 HIGASIKOTARI NAGAOKAKYO-SHI, Kyoto 617-8555 Japan

MODEL INFO

EA may be followed by K ($\pm 10\%$) (for $10\sim47$ pF), K ($\pm 10\%$) or M ($\pm 20\%$) (for $100\sim680$ pF), M ($\pm 20\%$) (for $1000\sim2200$ pF).

Class X1/Y1 Capacitors

Canadian Standard	Capacitor Class	Voltage (V)	AC or Capacitance DC	Tolerance (%)	Resistance for RC Devices		Temperature	Additional Robustness Grades
 	X1/Y1	1500	DC 10~2200pF	K(±10%)or M(±20%)		-40	125	
 	Y1	250 / 300	AC 10~2200pF	K(±10%)or M(±20%)		-40	125	
 	X1	440	AC 10~2200pF	K(±10%)or M(±20%)		-40	125	

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL Solutions' Follow - Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL Solutions' Follow - Up Service. Always look for the Mark on the product.

UL Solutions permits the reproduction of the material contained in Product iQ subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from Product iQ with permission from UL Solutions" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "©2024 UL LLC."







产品认证证书

证书编号: CQC16001142384

发证日期: 2023年04月18日

有效期至: 长期有效

委托人名称

株式会社 村田制作所

及注册地址

日本国京都府长冈京市东神足1丁目10-1番

制造商名称

株式会社 村田制作所

及注册地址

日本国京都府长冈京市东神足1丁目10-1番

生产企业名称

Murata Electronics (Thailand), Ltd.

及生产地址

63 Moo4, Tambol Ban-Klang, Amphur Muang, Lamphun 51000 泰国

产品名称和系列、

抑制电磁干扰和电源网络连接用固定电容器

规格、型号

EA: X1 440Vac, Y1 300Vac/250Vac, 10pF~2200pF,40/125/21/C

产品标准和技术要求 IEC60384-14:2005

认证模式

产品型式试验+初次工厂检查+获证后监督

上述产品符合 CQC11-471112-2015 认证规则的要求,特发此证。 本证书为变更证书,证书首次颁发日期: 2016年 04月 12日 本证书的有效性依据发证机构的定期监督获得保持。

可通过扫描下方二维码或登录国家认监委网站 (www.cnca.gov.cn) 查验证书信息



谢肇煦



国质量认证中心

http://www.cgc.com.cn

中国·北京·南四环西路188号9区 100070

电话: +86 10 83886666



CERTIFICATE OF PRODUCT CERTIFICATION

CERTIFICATE NO.: CQC16001142384

Valid from: Apr.18,2023 Valid until:long-term

NAME AND REGISTERED

Murata Manufacturing Co., Ltd.

ADDRESS OF THE APPLICANT

10-1 Higashikotari 1-Chome Nagaokakyo-shi Kyoto-fu 617-8555, Japan

NAME AND REGISTERED ADDRESS OF THE

Murata Manufacturing Co., Ltd.

MANUFACTURER

10-1 Higashikotari 1-Chome Nagaokakyo-shi Kyoto-fu 617-8555, Japan

NAME AND LOCATION OF THE FACTORY

Murata Electronics (Thailand), Ltd.

63 Moo4, Tambol Ban-Klang, Amphur Muang, Lamphun 51000 Thailand

PRODUCT NAME, MODEL AND SPECIFICATION

FIXED CAPACITORS FOR ELECTROMAGNETIC INTERFERENCE SUPPRESSION AND CONNECTION

TO THE SUPPLY MAINS

EA: X1 440Vac, Y1 300Vac/250Vac, 10pF~2200pF,40/125/21/C

THE STANDARDS AND TECHNICAL REQUIREMENTS FOR THE PRODUCTS

IEC60384-14:2005

TYPE OF CERTIFICATION SCHEMES

Type Testing of Product + Initial Factory Inspection + Follow up Factory Inspection

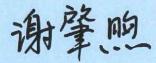
This is to certify that the above mentioned product(s) complies with the requirements of certification rules of CQC11-471112-2015. Date of original issued: Apr. 12,2016

The validity of the certificate is subject to positive result of the regular follow up inspection by issuing certification body.

The certificate information is available through the QR code below or CNCA's website: www.cnc



SIGNATURE:



CHINA QUALITY CERTIFICATION CENTRE



Section 9, No. 188, Nansihuan Xilu, Beijing 100070 P.R. China

Tel: +86 10 83886666

접수번호: KCA2023-00361



안 전 인 증 서 Safety Certificate

안전인증번호: HU03008-16007B

(Application No.)

제조업자/수입업자명: Murata Electronics (Thailand) Ltd.

(Manufacturer/importer)

주 소: Northern Region Industrial Estate, 63 Moo 4, Tambol Ban-Klang Amphur Muang, Lamphon

(Address) 51000 THAILAND

제 품 명: X-Y커패시터 (Product)

기본모델명: EA152M

(Basic Model)

파생모델명 (Series Model):

EA100K,EA120K,EA150K, [이면기재]

정격/안전기준상의 모델구분: X1: 440 V~, Y1: 250 V~, 1 500 pF

(Rating)

시험기준: KC 60384-1(2015-09), KC 60384-14(2015-09)

(Standard)

본 인증서는

제조국명: 태국

제조업자명: Murata Electronics (Thailand) Ltd.

제조공장의 주소: Northern Region Industrial Estate, 63 Moo 4, Tambol Ban-Klang Amphur

Muang, Lamphon 51000 THAILAND

의 제품에만 해당함

「전기용품 및 생활용품 안전관리법 시행규칙」제9조제2항, 제4항, 제10조제2항 또는 제15조제2항에 따라 안전인증서를 발급합니다. We issue this Safety Certificate for the above appliances in accordance with Article 9(2), 9(4), 10(2) or 15(2) of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.

2023 년 01 월 25 일 (Year) (Month) (Day)

한국기계전기전자시험연구원생생 Korea Testing Certification Inst

※ 이 인증서는 「전기용품 및 생활용품 안전관리법」에 따른 제품의 안전성 확인에 한정된 것이며, 그 밖의 다른 법률이 적용되는 제품의 경우에는 해당 법률에 따라 추가로 인증 • 허가 등을 받아야 합니다.

첨부서류

- 1. 전기용품의 안전관리부품 및 재질목록(List of Critical Components)
- 2. 기본모델 파생모델의 내용(Description of the basic and series model)
- 3. 안전인증의 변경 현황(Revisions Status)

<u>안전인증을 받은 자의 유의 사항</u> Notification for Recipients

1. 본 증명서는 기재된 제조공장에서 생산된 제품으로서 적용된 안전기준에 적합한 경우에 한하여 유효합니다.

(This certificate is valid only when the product meets the safety standards and is produced from the manufacturing factory that states on this certificate.)

2. 안전인증 마크는 본래의 의미와 다르게 사용자가 오해를 일으킬 수 있는 방법으로 광고, 카탈로그 등에 사용하면 인증정지 또는 취소의 사유가 됩니다.

(Cessation or cancellation of the certification may occur if the actual meaning of the Safety Certification Mark is misled to the public by false advertisement on a catalog of the product.)

3. 다음과 같은 사유가 발생할 경우에는 안전인증기관에 안전인증 변경 신청을 하여 안전인증서를 재교부 받아야 합니다.

(In case of the following events, the Safety Certificate shall be reapplied and reissued for revision)

- 1) 제조자, 대표자, 주소 등 인증서 기재내용의 변경
 - (Revisions in contents of the certificate such as manufacturer representative, address and etc.)
- 2) 파생모델의 추가, 변경 또는 삭제 (Additions, changes, or removals of series model)
- 3) 안전관리 부품의 변경 또는 추가

(Additions or changes in components which are listed on the certificate)

안전인증을 받은 자는 다음 사항을 이행하여야 합니다.

(Recipients of the Safety Certificate shall comply with the followings.)

- 1) 안전인증 표시 등 인증요건의 유지관리
 - (Maintaining and preserving the Mark and other certification requirements)
- * 안전인증을 받기 이전 또는 정지, 취소된 이후 생산된 제품에 안전인증 표시를 하면 법에 의거 처벌을 받게 됩니다.
 - (It will be punished by the law if the certification mark is used before the issue (or after suspension or cancellation) of the certification.)
- 2) 자체 검사의 실시 및 그 기록관리 (Self-testing and record keeping)
- * 안전인증을 받은 자는 제품검사를 철저히 실시하여 제품의 품질이 안전기준에 미달되지 않도록 유의. (Recipients of the Safety Certificate shall conduct products inspection strictly for products to comply with the safety standards)
- 5. 안전인증을 받을자는 전기용품 및 생활용품 안전관리법 제 7조에 따라 2년에 1회 정기검사를 실시하여야 한다. (Recipients of the Safety Certificate shall require to inspect once in two years according to the Article 7 section of the the Electrical Appliances and Consumer Products Safety Control Act.)
- 6. 인증서(증명서)에는 진위여부 확인을 위해 다음과 같은 사항이 적용되어 있습니다.
 - 1) 문서관리번호 (문서관리번호 노출시 CS홈페이지를 통해 기술문서 내용이 조회 가능함으로 사본 등 제출시 노출되지 않도록 주의하시기 바랍니다.)
 - 2) 시점확인필
 - 3) 2D바코드

접수번호: KCA2023-00361

