Safety Certificates
（安全規格認定書）

Ref. No. SCKX250_011AG

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

Type KX

X1 : 440 Vac(r.m.s.)　Y1 : 250 Vac(r.m.s.)

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）
UL	UL60384-14	E37921	No expiration date （有効期限無し）	b - 1
CSA	CSA E60384-14	1343810	No expiration date （有効期限無し）	b - 2
VDE	EN60384-14 IEC60384-14	40002831	No expiration date （有効期限無し）	b - 3
BSI	EN62368-1 EN60384-14 IEC60384-14	KM 37901	2027-12-07	b - 4
SEMKO	EN60384-14 IEC60384-14	SE-S2101013	2026-07-19	b - 5
DEMKO		D-08838	2026-07-19	b - 6
FIMKO		FI/41217	2026-10-12	b - 7
NEMKO		P21225672	No expiration date （有効期限無し）	b - 8
ESTI		24.0026	2026-03-01	b - 9
IMQ	EN60384-14	V4069	No expiration date （有効期限無し）	b - 10
CQC	GB/T6346.14	CQC04001011643	2029-8-27	b-11

* Above Certified No. may be changed on account of the revision of standards and the renewal of certification.
(* 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。)

Murata Mfg. Co.,Ltd.
株式会社 村田製作所

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): KJ may be followed by M for +/-20%, K for +/-10%.

Class X1/Y1 Capacitors, Model(s): EA may be followed by K (±10%) (for 10~47pF), K (±10%) or M (±20%) (for 100~680pF), M (±20%) (for 1000~2200pF).

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

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/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): TF may be followed by K (±10%).

Class X1/Y2 Capacitors, Model(s): SA may be followed by J (±5%), K (±10%) or M (±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): KY may be followed by J for +/-5%. K for +/-10%. M for +/-20%.

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): GF series for type GA342 may be followed by J (±5%) (for 10~82pF), K (±10%) (for 100~4700pF).

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): GF series for type GA352, GA355 may be followed by J (±5%) (for 10~82pF), K (±10%) (for 100~4700pF).

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): MF may be followed by K (±10%) (for 100~4700pF), M(±20%) (for 5600~10000pF).

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

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®

Model KX

File Number: E37921

COMPANY

MURATA MFG CO LTD
COMPONENT BUSINESS UNIT
1-10-1 HIGASIKOTARI
NAGAOKAKYO-SHI, Kyoto 617-8555 Japan

MODEL INFO

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

GENERAL

US Standard	Canadian Standard	Capacitor Class	Voltage (V)	AC or DC	Capacitance	Tolerance (%)	Resistance for RC Devices	Lower Temperature (°C)	Upper Temperature (°C)	Additional Robustness Grades
--	--	X1	250/440	AC	10 ~ 4700 pF	+/-20%		-40	125	
--	--	Y1	250/300	AC	10 ~ 4700 pF	+/-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."

Certificate of Compliance

Certificate: 1343810 **Master Contract:** 169822 (044559_0_000)

Project: 70084123 **Date Issued:** 2017-04-21

Issued to: **Murata Manufacturing Co., Ltd.**
10-1 Higashikotari 1-chome
Nagaokakyo-shi
Kyoto, 617-8555
JAPAN
Attention: Kosaku Kida

The products listed below are eligible to bear the CSA Mark shown

Issued by: Martin Buchanan
Martin Buchanan, P. Eng.

PRODUCTS

CLASS - C222151 - AUDIO AND VIDEO EQUIPMENT-Accessories and Parts for Electronic Products

Capacitors, type KX, KX reduced and KX 2nd reduced, X1 440V~, Y1 300V~, 40/125/21/C for 50-60Hz systems with the following capacitance ratings:

10pF, 15pF, 22pF, 33pF, 47pF, 68pF, 100pF, 150pF, 220pF, 330pF, 470pF, 680pF, 1000pF, 1500pF, 2200pF, 3300pF, 3900pF and 4700pF.

Note: The subject capacitors are Certified for use only as components of other Certified equipment where the suitability of the combination is to be determined by CSA.

APPLICABLE REQUIREMENTS

CAN/CSA-E60384-14:14 - Fixed capacitors for use in electronic equipment - Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains

Used in conjunction with

CAN/CSA-E60384-1:14 - Fixed capacitors for use in electronic equipment -Part 1: Generic specification

VDE Prüf- und Zertifizierungsinstitut

ZEICHENGENEHMIGUNG
MARKS APPROVAL

Murata Mfg. Co., Ltd.
(Headquarters)
10-1 Higashikotari 1-Chome
NAGAOKAKYO-SHI, KYOTO 617-8555
JAPAN

ist berechtigt, für ihr Produkt /
is authorized to use for their product

Festkondensator zur Unterdrückung elektromagnetischer Störungen, geeignet für Netzbetrieb

Fixed capacitor for electromagnetic interference suppression and connection to the supply mains

die hier abgebildeten markenrechtlich geschützten Zeichen
für die ab Blatt 2 aufgeführten Typen zu benutzen /
the legally protected Marks as shown below for the types referred to on page 2 ff.

Geprüft und zertifiziert nach /
Tested and certified according to

DIN EN 60384-14 (VDE 0565-1-1):2014-04; EN 60384-14:2013-08
DIN EN 60384-14/A1 (VDE 0565-1-1/A1):2017-04; EN 60384-14:2013/A1:2016
IEC 60384-14:2013
IEC 60384-14:2013/AMD1:2016

Aktenzeichen: 748200-4670-0054 / 261658
File ref.:

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Zertifizierungsstelle / *Certification*

Ausweis-Nr. 40002831 Blatt 1
Certificate No. *Page*

Weitere Bedingungen siehe Rückseite und Folgeblätter /
further conditions see overleaf and following pages

Offenbach, 2002-08-19
(letzte Änderung / updated 2019-08-30)

B. Megerle

VDE Zertifikate sind nur gültig bei Veröffentlichung unter: http://www.vde.com/zertifikat
VDE certificates are valid only when published on: *http://www.vde.com/certificate*

VDE

VDE Prüf- und Zertifizierungsinstitut
Zeichengenehmigung

Ausweis-Nr. / *Certificate No.* 40002831

Blatt / *Page* 2

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Murata Mfg. Co., Ltd. (Headquarters), 10-1 Higashikotari 1-Chome, NAGAOKAKYO-SHI, KYOTO 617-8555, JAPAN

Aktenzeichen / *File ref.*
748200-4670-0054 / 261658 / TL3 / KIL

letzte Änderung / *updated*
2019-08-30

Datum / *Date*
2002-08-19

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40002831.
This supplement is only valid in conjunction with page 1 of the Certificate No. 40002831.

Festkondensator zur Unterdrückung elektromagnetischer Störungen, geeignet für Netzbetrieb

Fixed capacitor for electromagnetic interference suppression and connection to the supply mains

Typ(en) / *Type(s)*

a) KX, standard version

b) KX, reduced version

c) KX, 2nd reduced version

Weitere Einzelheit(en) / *Further details*: Anlage Nr. 200, 600 und 700 vom 2019-08-30 / *Appendix no. 200, 600 and 700 dated 2019-08-30*

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Fachgebiet TL3
Section TL3

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / *Certificate No.* 40002831

Beiblatt / *Supplement*

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Murata Mfg. Co., Ltd. (Headquarters), 10-1 Higashikotari 1-Chome, NAGAOKAKYO-SHI, KYOTO 617-8555, JAPAN

Aktenzeichen / *File ref.*
748200-4670-0054 / 261658 / TL3 / KIL

letzte Änderung / *updated*
2019-08-30

Datum / *Date*
2002-08-19

Dieses Beiblatt ist Bestandteil des Zeichengenehmigungsausweises Nr. 40002831.
This supplement is part of the Certificate No. 40002831.

Festkondensator zur Unterdrückung elektromagnetischer Störungen, geeignet für Netzbetrieb

Fixed capacitor for electromagnetic interference suppression and connection to the supply mains

Fertigungsstätte(n)
Place(s) of manufacture

Referenz/*Reference*	
30002166	Murata Electronics (Thailand) Ltd. Northern Region Ind. Est., 63 Moo 4 Tambol Ban-Klang Amphur Muang LAMPHUN 51000 THAILAND

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Fachgebiet TL3
Section TL3

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / *Certificate No.*
40002831

Infoblatt / *Info sheet*

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Murata Mfg. Co., Ltd. (Headquarters), 10-1 Higashikotari 1-Chome, NAGAOKAKYO-SHI, KYOTO 617-8555, JAPAN

Aktenzeichen / *File ref.*	letzte Änderung / *updated*	Datum / *Date*
748200-4670-0054 / 261658 / TL3 / KIL	2019-08-30	2002-08-19

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40002831.
This supplement is only valid in conjunction with page 1 of the Certificate No. 40002831.

Genehmigung zum Benutzen des auf Seite 1 abgebildeten markenrechtlich geschützten Zeichens des VDE:

Grundlage für die Benutzung sind die Allgemeinen Geschäftsbedingungen (AGB) der VDE Prüf- und Zertifizierungsinstitut GmbH (www.vde.com\AGB-Institut). Das Recht zur Benutzung erstreckt sich nur auf die bezeichnete Firma mit den genannten Fertigungsstätten und die oben aufgeführten Produkte mit den zugeordneten Bezeichnungen. Die Fertigungsstätte muss so eingerichtet sein, dass eine gleichmäßige Herstellung der geprüften und zertifizierten Ausführung gewährleistet ist.
Die Genehmigung ist so lange gültig wie die VDE-Bestimmungen gelten, die der Zertifizierung zugrunde gelegen haben, sofern sie nicht auf Grund anderer Bedingungen aus der VDE Prüf- und Zertifizierungsordnung (PM102) zurückgezogen werden muss.
Der Gültigkeitszeitraum einer VDE-GS-Zeichengenehmigung kann auf Antrag verlängert werden. Bei gesetzlichen und / oder normativen Änderungen kann die VDE-GS-Zeichengenehmigung ihre Gültigkeit zu einem früheren als dem angegebenen Datum verlieren.
Produkte, die das Biozid Dimethylfumarat (DMF) enthalten, dürfen gemäß der Kommissionsentscheidung 2009/251/EG nicht mehr in den Verkehr gebracht oder auf dem Markt bereitgestellt werden.
Der VDE-Zeichengenehmigungsausweis wird ausschließlich auf der ersten Seite unterzeichnet.

Approval to use the legally protected Mark of the VDE as shown on the first page:
Basis for the use are the general terms and conditions of the VDE Testing and Certification Institute (www.vde.com\terms-institute). The right to use the mark is granted only to the mentioned company with the named places of manufacture and the listed products with the related type references. The place of manufacture shall be equipped in a way that a constant manufacturing of the certified construction is assured.
The approval is valid as long as the VDE specifications are in force, on which the certification is based on, unless it is withdrawn according to the VDE Testing and Certification Procedure (PM102E).
The validity period of a VDE-GS-Mark Approval may be prolonged on request. In case of changes in legal and / or normative requirements, the validity period of a VDE-GS-Mark Approval may be shortened.
Products containing the biocide dimethylfumarate (DMF) may not be marketed or made available on the EC market according to the Commission Decision 2009/251/EC.
The approval is solely signed on the first page.

VDE Prüf- und Zertifizierungsinstitut
Zeichengenehmigung

Rubrik / *Rubric*	Ausweis-Nr. / *Certificate No.*	Anlage / *Appendix*
341	40002831	200

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

Murata Mfg. Co., Ltd., (Headquarters), 10-1 Higashikotari 1-Chome, NAGAOKAKYO-SHI, KYOTO 617-8555, Japan

Aktenzeichen / *File ref.*	letzte Änderung / *updated*	Datum / *Date*
748200-4670-0054/261658/TL3/KIL	2019-08-30	2002-08-19

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40002831 .
This supplement is only valid in conjunction with page 1 of the Certificate No. 40002831

Festkondensator zur Unterdrückung elektromagnetischer Störungen, geeignet für Netzbetrieb
Fixed capacitor for electromagnetic interference suppression and connection to the supply mains

Typ(en) *Type(s)*	a) KX, standard version b) KX, reduced version c) KX, 2nd reduced version		
Bemessungskapazität *Rated capacitance*	a) 10 pF; 15 pF; 22 pF; 33 pF; 47 pF; 68 pF; 100 pF; 150 pF; 220 pF; 330 pF; 470 pF; 680 pF; 1000 pF; 1500 pF; 2200 pF; 3300 pF; 3900 pF; 4700 pF b) 100 pF; 150 pF; 220 pF; 330 pF; 470 pF; 680 pF; 1000 pF; 1500 pF; 2200 pF; 3300 pF; 3900 pF; 4700 pF c) 100 pF; 150 pF; 220 pF; 330 pF; 470 pF; 680 pF		
Bemessungsspannung *Rated voltage*	X1: AC 440 V Y1: AC 250/300 V		
Kondensatorklasse und -unterklasse *Capacitor class and subclass*	X1 / Y1		
Grenzabweichung der Bemessungskapazität *Tolerance of rated capacitance*	±5% (J) oder/or ±10% (K) oder/or ±20% (M)		
Klimakategorie *Climatic category*	40/125/21		
Kategorie der passiven Entflammbarkeit *Passive flammability category*	C		
Keramikart *Type of ceramic*	SL (10 pF bis/to 68 pF) B (100 pF bis/to 1000 pF) or (100 pF bis/to 680 pF) E (1000 pF bis/to 4700 pF)		
Genehmigung für Gleichspannungs-anwendungen nach Anhang H *Approval for d.c. applications according to Annex H*	☐	ja *yes*	Bemessungsgleichspannung DC ___ V *d.c. rated voltage*
	☒	nein *no*	
Genehmigung für Feuchtebeständigkeitsklasse nach Anhang I *Approval for humidity robustness grade according to Annex I*	☐	IA	21 Tage bei 40 °C / 93 % r.F. mit angelegter Bemessungsspannung *21 days at 40 °C / 93 % r.h. with rated voltage applied*
	☐	IB	168 Stunden bei 85 °C / 85 % r.F. mit angelegter Bemessungsspannung *168 hours at 85 °C / 85 % r.h. with rated voltage applied*
	☐	IIA	56 Tage bei 40 °C / 93 % r.F. mit angelegter Bemessungsspannung *56 days at 40 °C / 93 % r.h. with rated voltage applied*
	☐	IIB	500 Stunden bei 85 °C / 85 % r.F. mit angelegter Bemessungsspannung *500 hours at 85 °C / 85 % r.h. with rated voltage applied*

VDE Prüf- und Zertifizierungsinstitut
Zeichengenehmigung

Rubrik / *Rubric*	Ausweis-Nr. / *Certificate No.*	Anlage / *Appendix*
341	40002831	200

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

Murata Mfg. Co., Ltd., (Headquarters), 10-1 Higashikotari 1-Chome, NAGAOKAKYO-SHI, KYOTO 617-8555, Japan

Aktenzeichen / *File ref.*	letzte Änderung / *updated*	Datum / *Date*
748200-4670-0054/261658/TL3/KIL	2019-08-30	2002-08-19

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40002831 .
This supplement is only valid in conjunction with page 1 of the Certificate No. 40002831

	☐	IIIA	56 Tage bei 60 °C / 93 % r.F. mit angelegter Bemessungsspannung *56 days at 60 °C / 93 % r.h. with rated voltage applied*
	☐	IIIB	1.000 Stunden bei 85 °C / 85 % r.F. mit angelegter Bemessungsspannung *1.000 hours at 85 °C / 85 % r.h. with rated voltage applied*
	☒	keine *none*	

Kitemark™ Certificate

This is to certify that:

Murata Manufacturing Co Ltd
10-1 Higashikotari 1-chome
Nagaokakyo-shi
Kyoto
617-8555
Japan

Holds Certificate Number: KM 37901

In respect of:

BS EN 62368-1:2014+A11:2017
Safety of electronic components for audio/video, information and communication technology equipment

This issues the right and licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Certificate shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Certificate provided at or from the above address.

For and on behalf of BSI:

Frank Lee, Product Certification Technical and Compliance Director

First Issued: 1997-10-09
Latest Issue: 2021-12-08

Effective Date: 2021-12-08
Expiry Date: 2024-12-07

...making excellence a habit.™

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 37901

Capacitor Types	Manufacturing Plants
KH Series	Murata Electronics (Thailand) Ltd
KX Series	Murata Electronics (Thailand) Ltd
KY Series	Murata Electronics (Thailand) Ltd

Standards

1. BS EN 62368-1:2014+A11:2017
   Sub-clauses 5.4.4.2 (enclosure thickness ≥ 0.4 mm), 5.5.2.1 and G.11.2.

2. BS EN 60384-14:2013+A1:2016 (IEC 60384-14:2013+AMD1:2016)
   Sub-clauses as listed in Table 3 of that standard.

Manufacturing Plant address:

Murata Electronics (Thailand) Ltd
Northern Region Industrial Estate
63 Moo 4, Tambol Ban-Klang
Amphur Muang, Lamphun 51000
Thailand

Periodic Product Verification testing (PVT) carried out at:

Izumo Murata Mfg Co Ltd
2308 Kaminaoe
Hikawa-cho
Izumo-shi
Shimane
699-0696
Japan

First Issued: 1997-10-09
Latest Issue: 2021-12-08

Effective Date: 2021-12-08
Expiry Date: 2024-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 37901

KH Series, isolating ceramic capacitors (standard and reduced sizes).

Sub-Class	Rated Voltage	Climatic Category	Type test impulse test voltage of the capacitor kV peak	Type test r.m.s. test voltage of the capacitor kV r.m.s.
X1	250 Vac 440 Vac	40/125/21 C	5	1.5
Y2	250 Vac 300 Vac			

Type	Capacitance (pF)	Tolerance (+/- %)	Ceramic
101 (K or M)	100	10 or 20	B
151 (K or M)	150	10 or 20	B
221 (K or M)	220	10 or 20	B
331 (K or M)	330	10 or 20	B
471 (K or M)	470	10 or 20	B
681 (K or M)	680	10 or 20	B
102 (K or M)	1000	10 or 20	B
102 (M)	1000	20	E
152 (M)	1500	20	E
222 (M)	2200	20	E
332 (M)	3300	20	E
392 (M)	3900	20	E
472 (M)	4700	20	E
472 (M)	4700	20	F
103 (M)	10 000	20	F

First Issued: 1997-10-09
Latest Issue: 2021-12-08

Effective Date: 2021-12-08
Expiry Date: 2024-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 37901

KX Series, isolating ceramic capacitors (standard and reduced sizes).

Sub-Class	Rated Voltage	Climatic Category	Type test impulse test voltage of the capacitor kV peak	Type test r.m.s. test voltage of the capacitor kV r.m.s.
X1	250 Vac 440 Vac	40/125/21 C	8	4
Y1	250 Vac 300 Vac			

Type	Capacitance (pF)	Tolerance (+/- %)	Ceramic
100 (J or K)	10	5 or 10	SL
150 (J or K)	15	5 or 10	SL
220 (J or K)	22	5 or 10	SL
330 (J or K)	33	5 or 10	SL
470 (J or K)	47	5 or 10	SL
680 (J or K)	68	5 or 10	SL
101 (K or M)	100	10 or 20	B
151 (K or M)	150	10 or 20	B
221 (K or M)	220	10 or 20	B
331 (K or M)	330	10 or 20	B
471 (K or M)	470	10 or 20	B
681 (K or M)	680	10 or 20	B
102 (K or M)	1000	10 or 20	B
102 (M)	1000	20	E
152 (M)	1500	20	E
222 (M)	2200	20	E
332 (M)	3300	20	E
392 (M)	3900	20	E
472 (M)	4700	20	E

First Issued: 1997-10-09
Latest Issue: 2021-12-08

Effective Date: 2021-12-08
Expiry Date: 2024-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 37901

KY Series, isolating ceramic capacitors (standard and reduced sizes).

Sub-Class	Rated Voltage	Climatic Category	Type test impulse test voltage of the capacitor kV peak	Type test r.m.s. test voltage of the capacitor kV r.m.s.
X1	250 Vac	40/125/21 C	5	1.5
Y2	250 Vac 300 Vac			

Type	Capacitance (pF)	Tolerance (+/- %)	Ceramic
100 (J or K)	10	5 or 10	SL
150 (J or K)	15	5 or 10	SL
220 (J or K)	22	5 or 10	SL
330 (J or K)	33	5 or 10	SL
470 (J or K)	47	5 or 10	SL
680 (J or K)	68	5 or 10	SL
101 (K or M)	100	10 or 20	B
151 (K or M)	150	10 or 20	B
221 (K or M)	220	10 or 20	B
331 (K or M)	330	10 or 20	B
471 (K or M)	470	10 or 20	B
681 (K or M)	680	10 or 20	B
102 (K or M)	1 000	10 or 20	B
102 (M)	1 000	20	E
152 (M)	1 500	20	E
182 (M)	1 800	20	E
222 (M)	2 200	20	E
332 (M)	3 300	20	E
392 (M)	3 900	20	E
472 (M)	4 700	20	E
103 (M)	10 000	20	F

First Issued: 1997-10-09
Latest Issue: 2021-12-08

Effective Date: 2021-12-08
Expiry Date: 2024-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

By Royal Charter

Kitemark™ Certificate

This is to certify that:

Murata Manufacturing Co Ltd
10-1 Higashikotari 1-chome
Nagaokakyo-shi
Kyoto
617-8555
Japan

Holds Certificate Number: KM 37901

In respect of:

BS EN IEC 62368-1
Audio/video, information and communication technology equipment

This issues the right and licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Certificate shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Certificate provided at or from the above address.

For and on behalf of BSI:

Shahm Barhom, Group Product Certification Director

First Issued: 1997-10-09
Latest Issue: 2024-12-05

Effective Date: 2024-12-08
Expiry Date: 2027-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 37901

Capacitor Types	Manufacturing Plants
KH Series	Murata Electronics (Thailand) Ltd
KX Series	Murata Electronics (Thailand) Ltd
KY Series	Murata Electronics (Thailand) Ltd

Standards

1. BS EN IEC 62368-1:2020+A11:2020
Sub-clauses 5.4.4.2 (enclosure thickness ≥ 0.4 mm), 5.5.2.1 and G.11.2.

2. BS EN IEC 60384-14:2023
Sub-clauses as listed in Table 15 of that standard.

Manufacturing Plant address:

Murata Electronics (Thailand) Ltd
Northern Region Industrial Estate
63 Moo 4, Tambol Ban-Klang
Amphur Muang, Lamphun 51000
Thailand

Periodic Product Verification testing (PVT) carried out at:

Izumo Murata Mfg Co Ltd
2308 Kaminaoe
Hikawa-cho
Izumo-shi
Shimane
699-0696
Japan

First Issued: 1997-10-09
Latest Issue: 2024-12-05

Effective Date: 2024-12-08
Expiry Date: 2027-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 37901

KH Series, isolating ceramic capacitors (standard and reduced sizes).

Sub-Class	Rated Voltage	Climatic Category	Type test impulse test voltage of the capacitor kV peak	Type test r.m.s. test voltage of the capacitor kV r.m.s.
X1	250 Vac 440 Vac	40/125/21 C	5	1.5
Y2	250 Vac 300 Vac			

Type	Capacitance (pF)	Tolerance (+/- %)	Ceramic
101 (K or M)	100	10 or 20	B
151 (K or M)	150	10 or 20	B
221 (K or M)	220	10 or 20	B
331 (K or M)	330	10 or 20	B
471 (K or M)	470	10 or 20	B
681 (K or M)	680	10 or 20	B
102 (K or M)	1000	10 or 20	B
102 (M)	1000	20	E
152 (M)	1500	20	E
222 (M)	2200	20	E
332 (M)	3300	20	E
392 (M)	3900	20	E
472 (M)	4700	20	E
472 (M)	4700	20	F
103 (M)	10 000	20	F

First Issued: 1997-10-09
Latest Issue: 2024-12-05

Effective Date: 2024-12-08
Expiry Date: 2027-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 37901

KX Series, isolating ceramic capacitors (standard and reduced sizes).

Sub-Class	Rated Voltage	Climatic Category	Type test impulse test voltage of the capacitor kV peak	Type test r.m.s. test voltage of the capacitor kV r.m.s.
X1	250 Vac 440 Vac	40/125/21 C	8	4
Y1	250 Vac 300 Vac			

Type	Capacitance (pF)	Tolerance (+/- %)	Ceramic
100 (J or K)	10	5 or 10	SL
150 (J or K)	15	5 or 10	SL
220 (J or K)	22	5 or 10	SL
330 (J or K)	33	5 or 10	SL
470 (J or K)	47	5 or 10	SL
680 (J or K)	68	5 or 10	SL
101 (K or M)	100	10 or 20	B
151 (K or M)	150	10 or 20	B
221 (K or M)	220	10 or 20	B
331 (K or M)	330	10 or 20	B
471 (K or M)	470	10 or 20	B
681 (K or M)	680	10 or 20	B
102 (K or M)	1000	10 or 20	B
102 (M)	1000	20	E
152 (M)	1500	20	E
222 (M)	2200	20	E
332 (M)	3300	20	E
392 (M)	3900	20	E
472 (M)	4700	20	E

First Issued: 1997-10-09
Latest Issue: 2024-12-05

Effective Date: 2024-12-08
Expiry Date: 2027-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

Kitemark™ Certificate

No. KM 37901

KY Series, isolating ceramic capacitors (standard and reduced sizes).

Sub-Class	Rated Voltage	Climatic Category	Type test impulse test voltage of the capacitor kV peak	Type test r.m.s. test voltage of the capacitor kV r.m.s.
X1	250 Vac	40/125/21 C	5	1.5
Y2	250 Vac 300 Vac			

Type	Capacitance (pF)	Tolerance (+/- %)	Ceramic
100 (J or K)	10	5 or 10	SL
150 (J or K)	15	5 or 10	SL
220 (J or K)	22	5 or 10	SL
330 (J or K)	33	5 or 10	SL
470 (J or K)	47	5 or 10	SL
680 (J or K)	68	5 or 10	SL
101 (K or M)	100	10 or 20	B
151 (K or M)	150	10 or 20	B
221 (K or M)	220	10 or 20	B
331 (K or M)	330	10 or 20	B
471 (K or M)	470	10 or 20	B
681 (K or M)	680	10 or 20	B
102 (K or M)	1 000	10 or 20	B
102 (M)	1 000	20	E
152 (M)	1 500	20	E
182 (M)	1 800	20	E
222 (M)	2 200	20	E
332 (M)	3 300	20	E
392 (M)	3 900	20	E
472 (M)	4 700	20	E
103 (M)	10 000	20	F

First Issued: 1997-10-09
Latest Issue: 2024-12-05

Effective Date: 2024-12-08
Expiry Date: 2027-12-07

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated online.

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

intertek
Total Quality. Assured.

CERTIFICATE

FOR EUROPEAN PRODUCT SAFETY

Reference No. SE-S-2101013

Capacitor for radio interference suppression

Type designation: KX

Certificate holder: Murata Mfg. Co. Ltd.
10-1 Higashikotari 1-chome
Nagaokakyo-shi
Kyoto-fu 617-8555
JAPAN

The product complies with the standard(s): EN 60384-14:2013+A1

Date of expiry: 19 July, 2026

Additional information in Appendix

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

Signed: **Date:** 19 July, 2021

Quan Li

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.

intertek
Total Quality. Assured.

APPENDIX:

Reference No. SE-S-2101013

Technical Data:

Type designation	KX
Rated voltage (V)	440VAC X1, 250, 300VAC Y1
Input	10-4700pF +-5%, +-10%,+-20%
Class	X1/Y1
Trademark	Ⓜ
Test Report	2100719STO-001
Product information	40/125/21/C. Ceramic SL: 10,15,22,33,47,68pF+-5%, +-10%, Ceramic B: 100,150,220,330,470,680,1000pF+-10%,+-20%, Ceramic E: 1000,1500,2200,3300,3900,4700pF+-20%. Standard, reduced and 2nd reduced size

Manufacturing Sites:

Murata Electronics (Thailand) Ltd.
Northern Region Industrial Estate
63 Moo 4 Tambol Ban-Klang
Amphur Muang Lamphun 51000
THAILAND

Based on CB with ref.No. DE1-57260/B1 and DE1-57260/B2 dated 30May 2016, issued by VDE.

This certificate replaces previously issued ref. No. 1905545 dated 28 February 2019. A new certificate has been issued on account of renewal.

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

Signed: **Date:** 19 July, 2021

Quan Li

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.

DEMKO CERTIFICATE

Certificate No.	D-08838
Page	1/3
Date of Issue	2021-10-19
Certificate Holder	MURATA MANUFACTURING CO LTD 10-1 HIGASHIKOTARI 1-CHOME NAGAOKAKYO-SHI, Kyoto, 617-8555 JAPAN
Manufacturer	MURATA MANUFACTURING CO LTD 10-1 HIGASHIKOTARI 1-CHOME NAGAOKAKYO-SHI, KYOTO, 617-8555 JAPAN
Production site	MURATA ELECTRONICS (THAILAND) LTD NORTHERN REGION INDUSTRIAL ESTATE 63 MOO 4 TAMBOL BAN-KLANG AMPHUR MUANG LAMPHUN 51000 THAILAND
Certified Product	Capacitor for radio interference suppression
Model	KX
Trademark	
Ratings	440VAC X1, 250, 300VAC Y1, 10-4700pF +-5%, +-10%,+-20%
Tested according to	EN 60384-14:2013, EN 60384-14:2013/A1:2016
Test Report No.	SE-S-2101013 issued on 2021-07-19
Additional	Class: X1/Y1 40/125/21/C. Ceramic SL: 10,15,22,33,47,68pF+-5%, +-10%, Ceramic B: 100,150,220,330,470,680,1000pF+-10%,+-20%, Ceramic E: 1000,1500,2200,3300,3900,4700pF+-20%. Standard, reduced and 2nd reduced size
Expire date	2026-07-19

Certification Manager
Jan-Erik Storgaard

This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the D-Mark Requirements. As specified in the respective appendix below the Designated Certificate holder is entitled to use the D-Mark, or its alternative for cables, for the Certified Product manufactured at the production site(s) identified above, in accordance with the D-Mark Service Agreement, including without limitation the D-Mark Testing and Certification Services Service Terms. Only those Products bearing the D-Mark should be considered as being covered by UL's D-Mark Service. This Certificate shall remain valid through the expiration date, unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the expiration date.

Certification Body

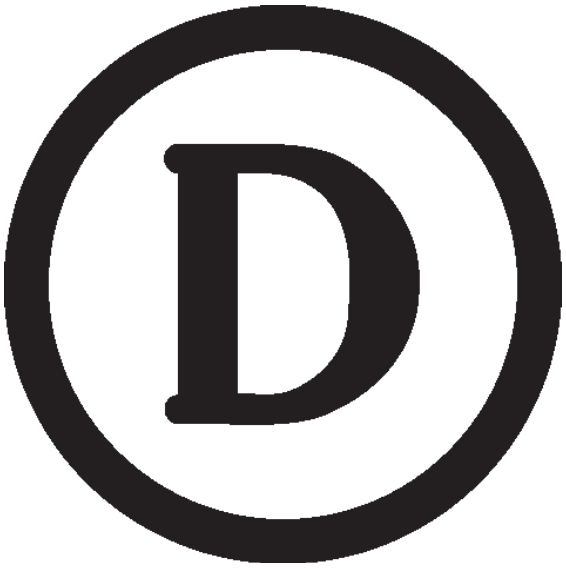
UL International Demko A/S, Borupvang 5A, DK-2750 Ballerup, Denmark, Tel. +45 44 85 65 65,
info.dk@ul.com
www.UL.com

Appendix DEMKO CERTIFICATE

Certificate No. D-08838
Page 2/3
Date of Issue 2021-10-19

Certification Mark D-Mark

The D-Mark, as displayed below, shall appear on certified products only. Except as specified below the Mark shall be legible and no Minimum size is specified.



The size of the Mark may be reduced or enlarged on the condition that it remains readable and that the proportions of width and height are kept. The use of dark text for the D-Mark on light backgrounds and light text on dark backgrounds is permitted.

The D-Mark may appear on a label, nameplate, or may be cast, stamped or molded into the product. When appearing on a label or nameplate, the Manufacturer's name or trademark along with a model number are also required on that same label or nameplate. If cast, stamped or molded, the Certificate Manufacturer's name or trademark and model number shall also appear elsewhere on the product

When putting the product on the EU market, the manufacturer's name, trademark or mark of origin must be affixed in a clearly visible location and position on the product, on the package and in the user manual. It can be affixed by label, be directly imprinted, or cast or molded into the product.

Where the size of the product does not allow the Mark, the manufacturer's name, trademark, mark of origin and model number to be legible, and appearance on a label is not desired, it is allowed to cast, stamp or mold the Mark into the product, in a size which is not visible to the naked eye, provided the legible Mark, the manufacturer's name, trademark or mark of origin and model number appears on the package and in the user manual

Appendix DEMKO CERTIFICATE

Certificate No. D-08838
Page 3/3
Date of Issue 2021-10-19

Alternate certification Mark for cables

As an alternative to the D-Mark specified above the alternate D-Mark, displayed below, can appear on certified cables only. Minimum size is not specified, as long as the mark is legible.

◅DEMKO▻

The alternate D-Mark may be cast, stamped or molded into the cable and continue throughout the length of the cable as specified in the applicable cable standard.

All content shall be in accordance with the details provided on this D-Mark Certificate.

Certification Body

UL International Demko A/S, Borupvang 5A, DK-2750 Ballerup, Denmark, Tel. +45 44 85 65 65, info.dk@ul.com www.UL.com

CERTIFICATE FI/41217

Our Ref. HEL-CERT190300214-02

Product	Fixed capacitor for electromagnetic interference suppression and connection to the supply mains
Type	KX
Trademark	
Certificate Holder	Murata Manufacturing Co., Ltd 10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto-fu 617-8555 Japan
Technical information	KX (X1): 400V~ KX (Y1): 250V~, 300V~ 10-4700pF, ±5%,±10% ±20%, 40/125/21/C
Other information	Ceramic SL: 10, 15, 22, 33, 47, 68pF ±5%, ±10% Ceramic B: 100, 150, 220, 330, 470, 680, 1000pF ±10% ±20% Ceramic E: 1000, 1500, 2200, 3300, 3900, 4700pF ±20% Standard, reduced and 2nd reduced size. Fulfils IEC 60384-14:2013 + A1:2016.
The product is certified according to the following standard(s)	EN 60384-14:2013 + A1:2016
Validity	This certificate is valid until 2026-10-12 provided that the Conditions for FI certification are met. This certificate includes the right to use the FI mark under the condition that changes (if any) will be checked at SGS Fimko before the product is brought onto market and that the conditions for FI certification are met.
Date of issue	2021-10-12
	SGS Fimko Ltd
Signature	Joonas Leinonen Certification Manager

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Fimko Ltd
Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

Page 2 of 2 to Certificate: **FI/41217**

Manufacturer	Murata Manufacturing Co., Ltd 10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto-fu 617-8555 Japan
Manufacturing site	Murata Electronics (Thailand) Ltd. Northern Region Industrial Estate, 63 Moo 4 Tambol Ban-Klang, Amphur Muang Lamphun 51000, Thailand
Additional information	The product has certificate SE-S-2101013 issued by Intertek Semko AB in accordance with the Nordic Certification Service system. This certificate replaces previous certificate FI/40129, dated 2019-03-27, due to renewal of the certificate.
As shown in the Test Report(s) No(s):	214005-CC2-1->CC2-6, 2100719STO-001

FINAS
Finnish Accreditation Service
S003 (EN ISO/IEC 17065)

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Fimko Ltd
Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

CERTIFICATE

No. P21225672

Order No. 447733

Product	Capacitor for radio interference suppression
Applicant	Murata Mfg. Co., Ltd. 10-1, Higashikotari 1-chome, Nagaokakyo-shi Kyoto 617-8555 Japan
Manufacturer	Murata Mfg. Co., Ltd. 10-1, Higashikotari 1-chome, Nagaokakyo-shi Kyoto 617-8555 Japan
Factory	Murata Electronics (Thailand), Ltd. Northern Region Industrial Estate 63 Moo 4, Tambol Ban Klang, Amphur Muang, Lamphun 51000 Thailand
Ratings	440V AC X1
Trade mark	
Model / Type Ref.	KX
Principal characteristics	Capacitance 10-4700pF, Tolerance ±5%, Tolerance ±5%, ±10%, ±20%.
A sample of the product was tested and found to be in conformity with	CAP EN 60384-14:2013;A1
Validity	This certificate documents conformity with the standards shown, and also applies as license for use of Nemkos name and certification mark. The certificate and license is valid as long as the applicable conditions are complied with, and provided that any changes to the product are notified to Nemko for acceptance prior to implementation. New standards or amendments to the standards may imply that the product design must be updated and/or that re-testing and re-certification is necessary.
Additional information	See page 2
Additional model(s)	(1) See page 2

Date of issue 30-08-2021

Sweet Yuan

Certification Department

Nemko AS
Philip Pedersens vei 11, 1366 Lysaker, Norway
TEL +47 22 96 03 30 EMAIL info@nemko.com
ENTERPRISE NUMBER NO974404532

CERTIFICATE

No. P21225672

Order No. 447733

Additional model(s)

Product	Capacitor for radio interference suppression
Pos. No	1
Model / Type Ref.	KX
Trade mark (if different from page 1)	
Rating	250, 300VAC Y1
Principal characteristics	Capacitance 10-4700pF, Tolerance ±5%, Tolerance ±5%, ±10%, ±20%.
Additional information	40/125/21/C. Ceramic SL: 10,15,22,33,47,68pF+-5%, +-10%, Ceramic B: 100,150,220,330,470,680,1000pF+-10%,+-20%, Ceramic E: 1000,1500,2200,3300,3900,4700pF+-20%. Standard, reduced and 2nd reduced size

Date of issue 30-08-2021

Sweet Yuan

Certification Department

Nemko AS
Philip Pedersens vei 11, 1366 Lysaker, Norway
TEL +47 22 96 03 30 EMAIL info@nemko.com
ENTERPRISE NUMBER NO974404532

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Inspectorate for Heavy Current Installations ESTI
Market Surveillance/Safety Mark

Murata Manufacturing Co. Ltd.
10-1 Higashikotari 1-Chome
Nagaokakyo-shi
Kyoto-fu 617-8555
JAPAN

Client no.	Your reference	Our reference	Date
1589	Saori Sonoyama	Christoph Meile	05.01.2024

Authorization

Number: **24.0026**
valid until: **01.03.2026**

Marking: MJ 502

Based on the documents contained in file **18-BS-0053**, the Federal Inspectorate for Heavy Current Installations grants the firm named above the right to put the equipment listed below on the market marked with the Swiss safety mark in accordance with the NEV.

Equipment: **Fixed capacitors for electromagnetic interference suppression and connection to the supply mains**

Tradename: **MURATA**

Type designation	Nominal values	
KX	Rated capacitance:	10; 15; 22; 33; 47; 68; 100; 150; 220; 330; 470; 680; 1000; 1500; 2200; 3300; 3900; 4700pF
	Rated voltage:	a) 250 or 440Vac b) 250 or 300Vac
	Capacity Class and subclass:	a) X1 b) Y1

Federal Inspectorate for Heavy Current Installations ESTI
Luppmenstrasse 1, CH-8320 Fehraltorf
T +41 58 595 18 18
mub.bs.info@esti.ch
www.esti.admin.ch

SWISS ACCREDITATION sas.admin.ch SCESp 0033

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Authorization Number: **24.0026**

Type designation	Nominal values	
	Type of ceramic:	SL (10 to 68pF) B (100 to 1000pF) E (1000 to 4700pF)
	Tolerance of rated capacitance:	±5% or ±10% (SL) ±10% or ±20% (B) ±20% (E)
	Climatic category:	40/125/21
	Passive flammability category:	C
Protection class:		
Protection degree:		
Basis:	Certificate / BSI / KM 37901 / 08.12.2021 Test Report / BSI / 3642783 / 26.06.2023	
Remark:	Additional test according to EN 62368-1:2014+A11:17	
	Manufacturer site: Murata Electronics (Thailand) Ltd. Northern Region Industrial Estate 63 Moo 4, Tambol Ban-Klang Amphur Muang 51000 Lamphun, Thailand	
Test standards:	EN 60384-14:2013+A1:16	

Federal Inspectorate for Heavy Current Installations ESTI

Nicoli

Digital signiert von Nicoli
DN: cn=Nicoli, c=CH, o=ESTI, ou=PV, email=severo.nicoli@esti.ch
Datum: 2024.01.09 11:18:25 +01'00'

Severo Nicoli
Head of Market Surveillance/Safety Mark

IMQ S.p.A. - Società con Socio Unico
I-20138 Milano - via Quintiliano, 43
tel. 0250731 (r.a.) - fax 0250991500
e-mail: info@imq.it - www.imq.it

Rea Milano 1595884
Registro Imprese Milano 12898410159
C.F./P.I. 12898410159
Capitale Sociale € 4.000.000

PID:
08020004
CID:
C.1995.237

Certificato di approvazione

Approval certificate

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

PRD N° 005B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

IMQ, ente di certificazione accreditato, autorizza la ditta

IMQ, accredited certification body, grants to

MURATA MANUFACTURING CO. LTD.
10-1 HIGASHIKOTARI 1-CHOME
NAGAOKAKYO-SHI, KYOTO-FU 617-8555
JP - Japan

all'uso del marchio

the licence to use the mark

IMQ

Il presente certificato è soggetto alle condizioni previste nel Regolamento "MARCHI IMQ - Regolamento per la certificazione di prodotti" ed è relativo ai prodotti descritti nell'Allegato al presente certificato.

per i seguenti prodotti

Condensatori fissi per la soppr. delle interf. elettromagnetiche
(Serie KX)

for the following products

EMI suppression capacitors
(Series KX)

This certificate is subjected to the conditions foreseen by Rules "IMQ MARKS - RULES for product certification" and is relevant to the products listed in the annex to this certificate.

Emesso il / Issued on ***1995-09-26***

Aggiornato il / Updated on ***2019-10-23***

Sostituisce / Replaces ***2017-03-08***

IMQ S.p.A.

产品认证证书

证书编号：CQC04001011643

发证日期：2024 年 08 月 28 日
有效期至：2029 年 08 月 27 日

委托人名称及注册地址	株式会社 村田制作所 日本国京都府长冈京市东神足 1 丁目 10-1 番
制造商名称及注册地址	株式会社 村田制作所 日本国京都府长冈京市东神足 1 丁目 10-1 番
生产企业名称及生产地址	Murata Electronics (Thailand), Ltd. Northern Region Ind. Estate, 63 Moo 4, Tambol Ban-Klang Amphur Muang, Lamphun 51000, 泰国
产品名称和系列、规格、型号	抑制电磁干扰和电源网络连接用固定电容器 KX (X1:440VAC, Y1:250VAC, 10pF ~4.7nF；40/125/21/C（阻燃类别：C）)
产品标准和技术要求	GB/T 6346.14-2023
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 CQC11-471115-2023 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：2004 年 11 月 18 日
证书有效期内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

签发：谢肇煦

中国质量认证中心
CHINA QUALITY CERTIFICATION CENTRE

中国质量认证中心有限公司 1101061026946 6

中国质量认证中心有限公司
中国·北京·南四环西路188号9区 100070
电话：+86 10 83886666
http://www.cqc.com.cn

CERTIFICATE OF PRODUCT CERTIFICATION

CERTIFICATE NO.: CQC04001011643

Valid from: Aug.28,2024
Valid until:Aug.27,2029

NAME AND REGISTERED ADDRESS OF THE APPLICANT	Murata Manufacturing Co., Ltd. 10-1 Higashikotari 1-Chome Nagaokakyo-shi Kyoto-fu 617-8555, Japan
NAME AND REGISTERED ADDRESS OF THE MANUFACTURER	Murata Manufacturing Co., Ltd. 10-1 Higashikotari 1-Chome Nagaokakyo-shi Kyoto-fu 617-8555, Japan
NAME AND LOCATION OF THE FACTORY	Murata Electronics (Thailand), Ltd. Northern Region Ind. Estate, 63 Moo 4, 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 KX (X1:440VAC, Y1:250VAC, 10pF ~4.7nF ; 40/125/21/C (阻燃类别 : C))
THE STANDARDS AND TECHNICAL REQUIREMENTS FOR THE PRODUCTS	GB/T 6346.14-2023
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 CQC11-471115-2023.

Date of original issued: Nov.18,2004

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

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

SIGNATURE: 谢肇煦

中国质量认证中心
CHINA QUALITY CERTIFICATION CENTRE

中国质量认证中心有限公司 1101061026946

CHINA QUALITY CERTIFICATION CENTRE CO., LTD.
Section 9, No. 188, Nansihuan Xilu, Beijing 100070 P. R. China
Tel: +86 10 83886666
http://www.cqc.com.cn