

Safety Standard Certified Ceramic Capacitors

(安全規格認定セラミックコンデンサ)

Type GB

X2 : 250 Vac(r.m.s.)

Certification Body (認証機関)	Class (クラス)	Standard No. (規格番号)	Certificate No.* (認定番号)	Attached Page No. (添付ページ番号)
UL	X2	UL60384-14	E37921	2 - 1
VDE	X2	EN IEC 60384-14	94729	2 - 2
SEMKO	X2	EN IEC 60384-14	SE-S-2100996R1	2 - 3
ESTI	X2	EN IEC 60384-14	25.0651	2 - 4
CQC	X2	GB/T6346.14	CQC25001470283	2 - 5

* 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

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 ($\pm 10\%$) (for 10~47pF), K ($\pm 10\%$) or M ($\pm 20\%$) (for 100~680pF), M ($\pm 20\%$) (for 1000~2200pF).

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

Class X1/Y1 Capacitors, Model(s): 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 ($\pm 10\%$) or M ($\pm 20\%$) 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): IF may be followed by K ($\pm 10\%$).

Class X1/Y2 Capacitors, Model(s): SA 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): 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 ($\pm 5\%$) (for 10~82pF), K ($\pm 10\%$) (for 100~4700pF).

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

Class X1/Y2 Capacitors, Surface Mount Capacitors, Model(s): ME may be followed by K ($\pm 10\%$) (for 100~4700pF), M($\pm 20\%$) (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."

Model GB+GA35****GB****W*** (* may be space, 0 to 9, A to Z)

File Number: E37921

COMPANY

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

MODEL INFO

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.
 Class X2 Capacitors

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
--	--	X2	250	AC	10000 pF	+/- 10		-55	125	
--	--	X2	250	AC	15000 pF	+/- 10		-55	125	
--	--	X2	250	AC	22000 pF	+/- 10		-55	125	
--	--	X2	250	AC	33000 pF	+/- 10		-55	125	
--	--	X2	250	AC	47000 pF	+/- 10		-55	125	
--	--	X2	250	AC	56000 pF	+/- 10		-55	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."



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 IEC 60384-14 (VDE 0565-1-1):2024-10; EN IEC 60384-14:2023

Das Produkt erfüllt auch die Anforderungen nach /
The product also fulfills the requirements of

IEC 60384-14:2023

Aktenzeichen: 748200-4670-0050 / 327462

File ref.:

Ausweis-Nr. 94729

Blatt 1

Certificate No.

Page

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

Offenbach, 1997-04-01

(letzte Änderung / updated 2025-06-05)

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

M. Tasotti

VDE Zertifikate sind nur gültig bei Veröffentlichung unter:
VDE certificates are valid only when published on:

<http://www.vde.com/zertifikat>
<http://www.vde.com/certificate>

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Certificate No.	Blatt / Page
94729	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.*

748200-4670-0050 / 327462 / TL3 / BT

letzte Änderung / *updated*

2025-06-05

Datum / *Date*

1997-04-01

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 94729.

This supplement is only valid in conjunction with page 1 of the Certificate No. 94729.

Festkondensator zur Unterdrückung elektromagnetischer Störungen, geeignet für Netzbetrieb

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

Typ(en) / *Type(s)*

GB

Weitere Einzelheit(en)

Further details

Anlage Nr. 600 vom 2025-03-25 und
Anlagen Nr. 200 und 700 vom 2025-06-05.

*Appendix no. 600 dated 2025-03-25 and
Appendix no. 200 and 700 dated 2025-06-05.*

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Beiblatt /
Certificate No. Supplement
94729

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.*

748200-4670-0050 / 327462 / TL3 / BT

letzte Änderung / *updated*

2025-06-05

Datum / *Date*

1997-04-01

Dieses Beiblatt ist Bestandteil des Zeichengenehmigungsausweises Nr. 94729.

This supplement is part of the Certificate No. 94729.

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*

30009300

Izumo Murata Mfg. Co., Ltd.

2308 Kaminaoe Hikawa-cho

IZUMO CITY, SHIMANE-KEN 699-0696

JAPAN

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Infoblatt /
Certificate No. Info sheet
94729

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.

748200-4670-0050 / 327462 / TL3 / BT

letzte Änderung / updated

2025-06-05

Datum / Date

1997-04-01

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 94729.

This supplement is only valid in conjunction with page 1 of the Certificate No. 94729.

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.

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 94729.
This supplement is only valid in conjunction with page 1 of the Certificate No. 94729.

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

Typ(en) Type(s)	GB		
Bemessungskapazität Rated capacitance	Standard Size: 10000pF; 15000pF; 22000pF; 33000pF Reduced Size: 10000pF; 15000pF; 22000pF; 33000pF; 47000pF; 56000pF		
Bemessungsspannung Rated voltage	AC 250 V		
Kondensatorklasse und -unterklasse Capacitor class and subclass	X2		
Grenzabweichung der Bemessungskapazität Tolerance of rated capacitance	±10% (K)		
Klimakategorie Climatic category	55/125/21		
Kategorie der passiven Entflammbarkeit Passive flammability category	C		
Keramikart Type of ceramic	X7R		
Genehmigung für Gleichspannungsanwendungen nach Anhang H Approval for d.c. applications according to Annex H	<input type="checkbox"/>	ja	Bemessungsgleichspannung DC ___ V
	<input checked="" type="checkbox"/>	nein	d.c. rated voltage
Genehmigung für Feuchtebeständigkeitsklasse nach Anhang I Approval for humidity robustness grade according to Annex I	<input type="checkbox"/>	IA	21 Tage bei 40 °C / 93 % r.F. mit angelegter Bemessungsspannung 21 days at 40 °C / 93 % r.h. with rated voltage applied
	<input type="checkbox"/>	IB	168 Stunden bei 85 °C / 85 % r.F. mit angelegter Bemessungsspannung 168 hours at 85 °C / 85 % r.h. with rated voltage applied
	<input type="checkbox"/>	IIA	56 Tage bei 40 °C / 93 % r.F. mit angelegter Bemessungsspannung 56 days at 40 °C / 93 % r.h. with rated voltage applied
	<input type="checkbox"/>	IIB	500 Stunden bei 85 °C / 85 % r.F. mit angelegter Bemessungsspannung 500 hours at 85 °C / 85 % r.h. with rated voltage applied
	<input type="checkbox"/>	IIIA	56 Tage bei 60 °C / 93 % r.F. mit angelegter Bemessungsspannung 56 days at 60 °C / 93 % r.h. with rated voltage applied
	<input type="checkbox"/>	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
	<input checked="" type="checkbox"/>	keine	none





CERTIFICATE

FOR EUROPEAN PRODUCT SAFETY

Reference No. SE-S-2100996R1

Capacitor for radio interference suppression

Type designation: GB

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

**The product complies with
the standard(s):** EN IEC 60384-14:2023

Date of expiry: 07 November, 2030

Additional information in Appendix

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

Signed: 
Anneli Averland Johansson **Date:** 07 November, 2025

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.

APPENDIX:

Reference No. SE-S-2100996R1

Technical Data:

Type designation	GB
Rated voltage (V)	250VAC
Frequency (Hz)	50/60Hz
Input	10, 15, 22, 33, 47, 56nF +-10%
Class	X2
Trademark	
Test Report	2404539STO-001
Product information	Reduced size, SMD, Ceramic material: X7R, 55/125/21/C

Capacitance range

Nominal capacitance (pF)	Rated voltage (VAC)	Ceramic material group	Capacitance tolerance (%)
10000 15000 22000 33000 47000 56000	250	X7R	±10%

Manufacturing Sites: Izumo Murata Manufacturing Co., Ltd.
2308 Kaminaoe Hikawa-cho
Izumo-shi Shimane Pref. 699- 0696
JAPAN

This certificate replaces previously issued ref. No. SE-S-2100996 dated 14 July 2021. A new certificate has been issued due to new edition of standard.

Certification Body: Intertek Semko AB, Product Certification

Place: Kista - Stockholm

Signed:



Date: 07 November, 2025

Anneli Averland Johansson



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.
1589

Your reference
Miho Ogoe

Our reference
Christoph Meile

Date
16.07.2025

Authorization

Number: **25.0651**
valid until: **15.07.2028**



Marking:  MJ 502

Based on the documents contained in file **25-BS-0298**, 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: **Capacitors for radio interference suppression**

Tradename: **Murata (CM)**

Type designation **Nominal values**

GB AC 250 V, 55/125/21 C, Class X2, X7R, $\pm 10\%$
10000; 15000, 22000 and 33000 pF
Standard size

GB AC 250 V, 55/125/21 C, Class X2, X7R, $\pm 10\%$
10000, 15000, 22000, 33000, 47000 and 56000pF
Reduced size

Protection class:

Protection degree:

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





Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Authorization Number: **25.0651**

Basis: Marks Approval / VDE / 94729 / 05.06.2025

Remark:

Test standards: EN IEC 60384-14:2023

Federal Inspectorate for Heavy Current Installations ESTI

Severo Nicoli
Head of Market Surveillance/Safety Mark

Nicoli

Digital signiert von Nicoli
DN: cn=Nicoli, c=CH, o=ESTI,
ou=PV,
email=severo.nicoli@esti.ch
Datum: 2025.07.17 15:40:18
+02'00'





产品认证证书

证书编号: CQC25001470283

发证日期: 2025 年 04 月 30 日
有效期至: 2030 年 04 月 29 日

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 株式会社 出云村田制作所
及生产地址 日本国岛根县出云市斐川町上直江 2308

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
GB (X2 AC250V 10000pF~56000pF,55/125/21/C)

产品标准和技术要求 GB/T 6346.14-2023

认证模式 型式试验+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。
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
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.: CQC25001470283

Valid from: Apr.30,2025

Valid until:Apr.29,2030

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	Izumo Murata Manufacturing Co., Ltd. 2308,Kaminaoe,Hikawa-cho,Izumo-shi,Shimane 699-0696 Japan
PRODUCT NAME, MODEL AND SPECIFICATION	FIXED CAPACITORS FOR ELECTROMAGNETIC INTERFERENCE SUPPRESSION AND CONNECTION TO THE SUPPLY MAINS GB (X2 AC250V 10000pF ~ 56000pF,55/125/21/C)
THE STANDARDS AND TECHNICAL REQUIREMENTS FOR THE PRODUCTS	GB/T 6346.14-2023
TYPE OF CERTIFICATION SCHEMES	type test+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.

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



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>