

Safety Certificates

(安全規格認定書)

Ref. No. SCMF001N

Safety Standard Certified Ceramic Capacitors

(安全規格認定セラミックコンデンサ)

Type MF

X1 : 250 Vac(r.m.s.) Y2 : 250 Vac(r.m.s.) X1Y2 : 1000Vdc

| 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/cUL | X1Y2 | UL60384-14/CSA E60384-14 | E37921 | 6 - 1 |
| ENEC(VDE) | X1Y2 | EN IEC 60384-14 | 40039447 | 6 - 2 |

* 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 2025-05-30

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: "©2025 UL LLC."

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 

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): 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/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, 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).

Last Updated on 2025-02-19

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: "©2025 UL LLC."

Model MF

File Number: E37921

COMPANY

MURATA MFG CO LTD

COMPONENT BUSINESS UNIT

1-10-1 HIGASIKOTARI

NAGAOKAKYO-SHI, Kyoto 617-8555 Japan

MODEL INFO

MF may be followed by K ($\pm 10\%$) (for 100~4700pF), M($\pm 20\%$) (for 5600~10000pF).

Class X1/Y2 Capacitors, Surface Mount 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 Grad |
| ANSI/UL 60384-14 (2nd ed.) | CAN/CSA- E60384-14 (2014) | X1/Y2 | 250 | AC | 100~10000pF | K($\pm 10\%$) | | -55 | 125 | |
| ANSI/UL 60384-14 (2nd ed.) | CAN/CSA- E60384-14 (2014) | X1/Y2 | 1000 | DC | 100~10000pF | K($\pm 10\%$) | | -55 | 125 | |
| ANSI/UL 60384-14 (2nd ed.) | CAN/CSA- E60384-14 (2014) | X1/Y2 | 500 | AC | 1500~10000pF | K ($\pm 10\%$), M ($\pm 20\%$) | | -55 | 125 | |
| ANSI/UL 60384-14 (2nd ed.) | CAN/CSA- E60384-14 (2014) | X1/Y2 | 1000 | DC | 1500~10000pF | K ($\pm 10\%$), M ($\pm 20\%$) | | -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: "©2025 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

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

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.



und/oder - and/or

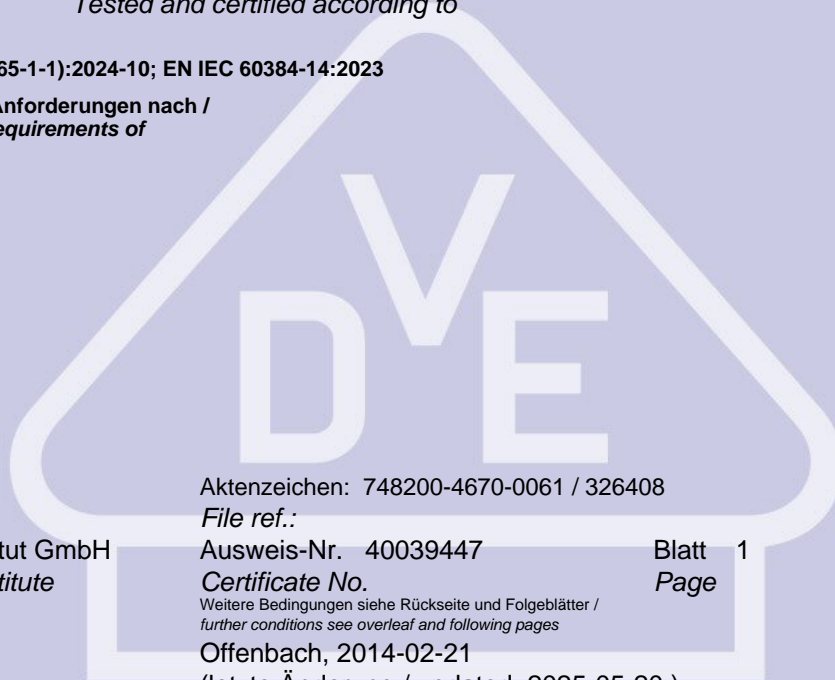


Geprüft und zertifiziert nach /
Tested and certified according to

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: 748200-4670-0061 / 326408

File ref.:

Ausweis-Nr. 40039447

Blatt 1

Certificate No.

Page

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

Offenbach, 2014-02-21

(letzte Änderung / updated 2025-05-20)

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

T. Lortz
T. Lortz

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. / Blatt /
Certificate No. / Page
40039447 / 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.*

748200-4670-0061 / 326408 / TL3 / DAT

letzte Änderung / *updated*

2025-05-20

Datum / *Date*

2014-02-21

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40039447.

This supplement is only valid in conjunction with page 1 of the Certificate No. 40039447.

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

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

Typ(en) / *Type(s)*

MF-Series

Warenzeicheninhaber
Trademark holder

Murata Mfg. Co., Ltd.
(Headquarters)

Weitere Einzelheit(en)
Further details

Anlagen Nr. 200, 600 und 700 vom 2025-05-20
Appendix no. 200, 600 and 700 dated 2025-05-20

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Beiblatt /
Certificate No. Supplement
40039447

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.*

748200-4670-0061 / 326408 / TL3 / DAT

letzte Änderung / *updated*

2025-05-20

Datum / *Date*

2014-02-21

Dieses Beiblatt ist Bestandteil des Zeichengenehmigungsausweises Nr. 40039447.

This supplement is part of the Certificate No. 40039447.

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

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

Referenz/*Reference*

30026727

Izumo Murata Manufacturing
Co., Ltd. Iwami plant (Hane)
800-4 Nishinosako, Hane-cho
OHDA-SHI 699-2211
JAPAN

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Infoblatt /
Certificate No. Info sheet
40039447

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.

748200-4670-0061 / 326408 / TL3 / DAT

letzte Änderung / updated

2025-05-20

Datum / Date

2014-02-21

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40039447.

This supplement is only valid in conjunction with page 1 of the Certificate No. 40039447.

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. 40039447.
This supplement is only valid in conjunction with page 1 of the Certificate No. 40039447.

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

| | | | |
|--|--|------------|---|
| Typ(en) Type(s) | MF-Series | | |
| Bemessungskapazität Rated capacitance | Type of ceramic U2J 100pF ; 120pF ; 150pF ; 180pF ; 220pF ; 270pF ; 330pF ; 390pF ; 470pF ; 560pF ; 680pF ; 820pF ; 1000pF ; 1200pF ; 1500pF ; 1800pF ; 2200pF ; 2700pF ; 3300pF ; 3900pF ; 4700pF ; 5600pF ; 6800pF ; 8200pF ; 10000pF ; Type of ceramic X7R 1500pF ; 2200pF ; 3300pF ; 4700pF ; 6800pF ; 10000pF ; | | |
| Bemessungsspannung Rated voltage | Type of ceramic U2J AC250V (100pF to 10000pF) Type of ceramic X7R AC500V DC1000V (1500pF to 10000pF) | | |
| Kondensatorklasse und -unterklasse Capacitor class and subclass | X1 Y2 | | |
| Grenzabweichung der Bemessungskapazität Tolerance of rated capacitance | ±10% (K) or/oder ±20% (M) | | |
| Klimakategorie Climatic category | 55/125/21 | | |
| Kategorie der passiven Entflammbarkeit Passive flammability category | C | | |
| Keramikart Type of ceramic | U2J (100 pF to 10000 pF) X7R (1500 pF to 10000 pF) | | |
| Genehmigung für Gleichspannungs- anwendungen nach Anhang H Approval for d.c. applications according to Annex H | <input type="checkbox"/> | ja yes | Bemessungsgleichspannung DC ___ V d.c. rated voltage |
| | <input checked="" type="checkbox"/> | nein no | |
| 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 |

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

6 - 2 (P6/6)

Rubrik / Rubric

341

Ausweis-Nr. /
Certificate No.
40039447

Anlage /
Appendix
200

Aktenzeichen / File ref.

748200-4670-
0061/326408/TL3/DAT

letzte Änderung / updated

2025-05-20

Datum / Date

2014-02-21

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40039447.
This supplement is only valid in conjunction with page 1 of the Certificate No. 40039447.

| | | | |
|--|--------------------------------------|----------------------|---|
| | <input type="checkbox"/> | IIIB | 1.000 Stunden bei 85 °C / 85 % r.F. mit angelegter Bemessungsspannung <i>1.000 hours at 85 °C / 85 % r.h. with rated voltage applied</i> |
| | <input checked="" type="checkbox"/> | keine <i>none</i> | |
| Warenzeicheninhaber <i>Trademark holder</i> | Murata Mfg. Co., Ltd. (Headquarters) | | |

