

Zertifikat *Certificate*

Zertifikatsnummer Certificate No.:

R 60186738 0001

Berichtsnummer Report No.:

HU26DW58 001

Genehmigungsinhaber License Holder:

Knowles (UK) Ltd
Hethel Engineering Centre,
Chapman Way, Hethel,
Norwich, Norfolk,
NR14 8FB
United Kingdom

Fertigungsstätte Manufacturing Site:

Knowles Electronics
(Suzhou) Co. Ltd.
No 20 Chunxing Road
Xiangcheng District
215131 Suzhou
P.R. China

Prüfzeichen Test Mark:

Geprüft nach Tested according to:

EN IEC 60384-14:2023

Geräteidentifikation
Product Identification
Produkt:

Capacitor

Product:

(Multi-Layer Ceramic Capacitor)

Modell:

Modelle sind auf nächste(r) Seite(n) gelistet

Type:
Type designation(s) are listed on the next page(s)
Technische Daten:

Rated voltage.....: 250 V a.c./1 kV d.c. or

Technical Data:

250 V a.c./305 V a.c./1 kV d.c.

Rated frequency.....: 50/60 Hz

Dielectric class...: Class II (X7R)

Type code.....: S2X or SYX or SYM

Class.....: X2 or Y2/X1

Trademark.....: SYFER, knowles

Gültig ab:

Valid from:

Zertifizierungsstelle:

Certification body:

Ausstellungsdatum: 2026-03-30

Date of issue:

Mózes Tibor



Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.

This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

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www.tuv.com
TÜVRheinland®
Precisely Right.

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Produkt Product: Capacitor
(Multi-Layer Ceramic Capacitor)

Modell Type: **Bezeichnung Designation:**
 S2X: 1808bA25ddddefgS2X; 1812bA25ddddefgS2X
 SYX: 1808bA25ddddefgSYX; 1812bA25ddddefgSYX; 2211bA25ddddefgSYX;
 2220bA25ddddefgSYX; 2215bA25ddddefgSYX
 SYM: 2220bA25ddddefgSYM

Type nomenclature

aaaa b A25 dddd e f g S2X ***, where

- "aaaa" is Type number / Size reference, can be:
 - 1808
 - 1812
- "b" means the Protection termination, can be:
 - Y: FlexiCap termination base with Ni Barrier. RoHS compliant.
(100% matte tin plating)
 - H: FlexiCap termination base with Ni Barrier.
(Tin/lead plating with a minimum of 10% lead)
 - J: Silver base with Nickel Barrier. RoHS compliant.
(100% matte tin plating)
 - A: Silver base with Nickel Barrier.
(Tin/lead plating with a minimum of 10% lead)
- "A25" means the Voltage rating: 250 V a.c. (X2)
- "dddd" means the Capacitance value, can be:
 - First digit: 0 (or, if capacitance <10 pF, first significant figure of capacitance value)
 - Second digit: First significant figure of capacitance value
(or, if cap <10 pF, "P" to signify units of pF)
 - Third digit: Second significant figure of capacitance value
 - Fourth digit: Number of zeros following, e.g. 0102 = 1000 pF.
- "e" means the Capacitance tolerance code, can be:
 - J = ±5%
 - K = ±10%
 - M = ±20%
- "f" means the Dielectric/release code, can be:
 - J: X7R
 - S: X7R AECQ
- "g" means the Packaging, can be:
 - T: 178mm (7") reel
 - R: 330mm (13") reel
 - B: Bulk pack - tubs
- "S2X" means 250 V a.c. (X2) safety tested surge capacitors.

*** Represents a three character suffix code, which will be allocated by Knowles when needed for specific customer requirements. This does not change the specifications defined hereon, complies with Knowles safety capacitor req. and also is in accordance with IEC 60384-14.

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Produkt *Product:*

Capacitor
(Multi-Layer Ceramic Capacitor)

Modell *Type:*

Bezeichnung *Designation:*

aaaa b A25 dddd e f g hhh ***, where

- "aaaa" is Type number / Size reference, can be:
 - 1808 • 1812 • 2211 • 2215 • 2220
- "b" means the Protection termination, can be:
 - Y: FlexiCap termination base with Ni Barrier. RoHS compliant.
(100% matte tin plating)
 - H: FlexiCap termination base with Ni Barrier.
(Tin/lead plating with a minimum of 10% lead)
 - J: Silver base with Nickel Barrier. RoHS compliant.
(100% matte tin plating)
 - A: Silver base with Nickel Barrier.
(Tin/lead plating with a minimum of 10% lead)
- "A25" means the Voltage rating: 250 V a.c. (Y2) / 305 V a.c. (X1)
- "dddd" means the Capacitance value, can be:
 - First digit: 0 (or, if capacitance <10 pF, first significant figure of capacitance value)
 - Second digit: First significant figure of capacitance value (or, if cap <10 pF, "P" to signify units of pF)
 - Third digit: Second significant figure of capacitance value
 - Fourth digit: Number of zeros following, e.g. 0102 = 1000 pF.
- "e" means the Capacitance tolerance code, can be:
 - J = ±5% • K = ±10% • M = ±20%
- "f" means the Dielectric/release code, can be:
 - J: X7R • S: X7R AECQ
- "g" means the Packaging, can be:
 - T: 178mm (7") reel • R: 330mm (13") reel • B: Bulk pack - tubs
- "hhh" means Type of capacitors, can be:
 - SYX: 305 V a.c. (X1) / 250 V a.c. (Y2) safety surge tested cap.
 - SYM: Open mode

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Modell *Type:* **Bezeichnung** *Designation:*

Detailed ratings

Type designation	Rated voltage (UR)	Type code	Class	Capacitance range
1808bA25ddddefgS2X	250 V a.c. / 1 kV d.c.	S2X	X2	150 pF - 5,6 nF
1812bA25ddddefgS2X	250 V a.c. / 1 kV d.c.	S2X	X2	150 pF - 15 nF
1808bA25ddddefgSYX	250 V a.c. / 305 V a.c. / 1 kV d.c.	SYX	Y2/X1	82 pF - 1,8 nF
1812bA25ddddefgSYX	250 V a.c. / 305 V a.c. / 1 kV d.c.	SYX	Y2/X1	100 pF - 4,7 nF
2211bA25ddddefgSYX	250 V a.c. / 305 V a.c. / 1 kV d.c.	SYX	Y2/X1	100 pF - 3,9 nF
2220bA25ddddefgSYX	250 V a.c. / 305 V a.c. / 1 kV d.c.	SYX	Y2/X1	150 pF - 10 nF
2220bA25ddddefgSYM	250 V a.c. / 305 V a.c. / 1 kV d.c.	SYM	Y2/X1	150 pF - 10 nF
2215bA25ddddefgSYX	250 V a.c. / 305 V a.c. / 1 kV d.c.	SYX	Y2/X1	2,7 nF - 6,8 nF

