

# Zertifikat *Certificate*

**Zertifikatsnummer Certificate No.:**

R 60186744 0001

**Berichtsnummer Report No.:**

HU26FW29 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./250 V a.c.

*Technical Data:*

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

Dielectric class...: Class II (X7R)

Type code.....: B16 or M16 or B56 or M56

Class.....: Y2/X1

Rated capacitance..: 150 pF - 4,7 nF

Trademark.....: SYFER, knowles

**Gültig ab:**

Valid from:

**Zertifizierungsstelle:**

Certification body:

**Ausstellungsdatum:** 2026-03-30

*Date of issue:*


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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.*

**TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg**
<http://www.tuv.com/safety> E-mail: markcheck@tuv.com

Fax: +49 221 806-3935

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**Produkt Product:** Capacitor  
(Multi-Layer Ceramic Capacitor)

**Modell Type:** **Bezeichnung Designation:**  
2220bA25ddddefgB16; 2220bA25ddddefgM16; 2220bA25ddddefgB56;  
2220bA25ddddefgM56

## Type nomenclature

2220 b A25 dddd e f g hhh \*\*\*, where

- "2220" is Type number / Size reference
- "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.
- "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:
  - X: X7R Precious metal      • J: X7R Base metal
- "g" means the Packaging, can be:
  - T: 178mm (7") reel      • R: 330mm (13") reel      • B: Bulk pack - tubs
- "hhh" means Type of capacitor, can be:
  - B16 or B56: Syfer Type A
  - M16 or M56: Syfer Type A Open Mode

\*\*\* 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.

