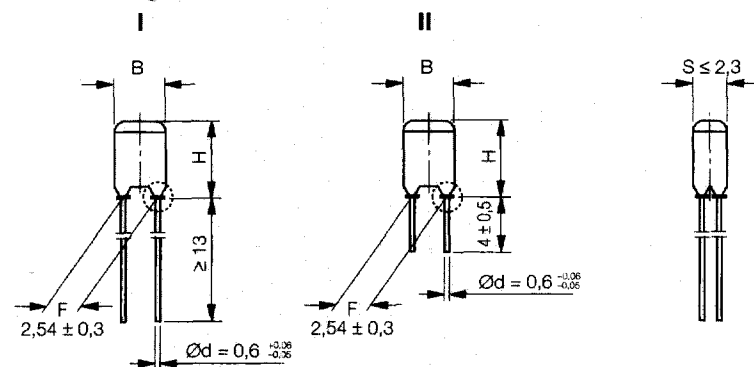


**Keramische Miniatur-Scheibenkondensatoren, Klasse 1B**  
**Miniature ceramic plate capacitors, class 1B**

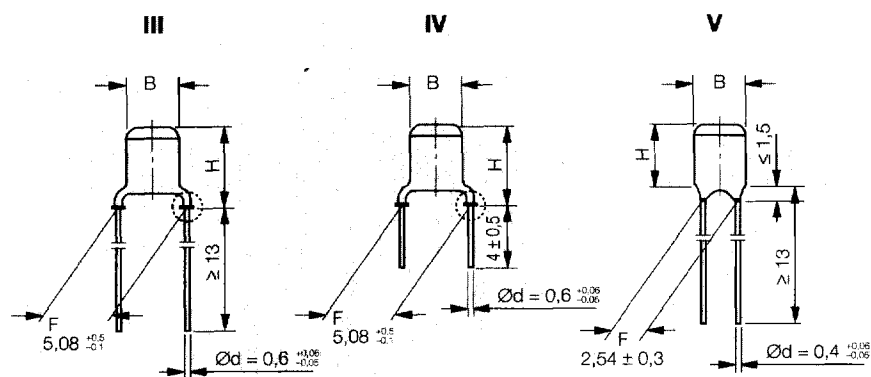
**Maßbild / Figure**



**Bestellbezeichnung / Ordering code: 10./11./12. Stelle / digit:**  
( ) = alte Bezeichnung / former code

„AWS“ (.11)

„AVS“ (J6)

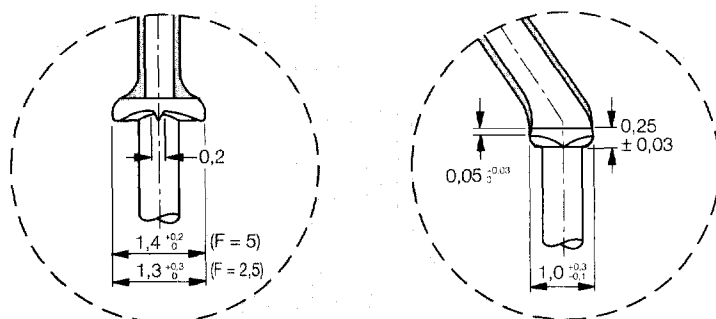


**Bestellbezeichnung / Ordering code: 10./11./12. Stelle / digit:**  
( ) = alte Bezeichnung / former code

„BWS“ (.14)

„BVS“ (FA)

„AA0“ (J4)



Abmessungen in mm  
Dimensions in mm

## Keramische Miniatur-Scheibenkondensatoren, Klasse 1B Miniature ceramic plate capacitors, class 1B

RO .

### Ausführung / Design:

Rechteck-Kondensator mit Phenolharzummhüllung

Rectangular capacitor with phenol resin coating

### Nennspannung $U_N$

Rated voltage  $U_R$ :

100 V–

### Prüfspannung $U_P$

Test voltage  $U_T$ :

300 V–

### Verlustfaktor $\tan \delta$

Dissipation factor  $\tan \delta$ :

(1MHz,  $\leq 5$  V)

$C \leq 50$  pF:

$\leq 1,5 \cdot \left( \frac{15}{C} + 0,7 \right) \cdot 10^{-3}$

max.  $5,5 \cdot 10^{-3}$

$C > 50$  pF:  $\leq 1,5 \cdot 10^{-3}$

### Isolationswiderstand $R_{is}$

Isolation resistance  $R_i$ :

$\geq 10^{10} \Omega$

### Betriebstemperatur $\vartheta_u$

Category temperature range  $\vartheta_u$ :

(–55... +85)°C

### Klimatische Anwendungsklasse nach DIN 40040

Climatic application class acc.

to DIN 40040:

FPF

### Klimatische Prüfkasse

nach DIN 40 045

Climatic testing class acc.

to DIN 40 045:

55/085/21

### Umhüllung / Coating:

Phenolharz, getaucht

phenol resin, dipped

### Kennzeichnung / Marking:

Kapazität Zifferncode gem.  
Capacitance DIN 40825 bzw. IEC 62

digit code according  
DIN 40825  
respectively IEC 62

Keramikart durch Farbcode  
Ceramic an der Oberkante  
material with colour band  
on the upper edge

### Löthinweise / Soldering conditions:

Löttemperatur: 260°C  $\pm$  5°C

Lötzeit: max. 10 s

Soldering temperature: 260°C  $\pm$  5°C

Soldering time: max. 10 s

### Diagramme / Diagrams:

siehe Seite / see page 7

### Gurtung / Taping:

siehe Seite / see page 21

| Baugröße<br>Size | Drahtausführung / Lead configuration |               |               |           |
|------------------|--------------------------------------|---------------|---------------|-----------|
|                  | B                                    | H „AWS“/„AVS“ | H „BWS“/„BVS“ | H „AA0“   |
| 1 (744)          | 3,6 - 1,1                            | 5,0 - 1,5     | 6,3 - 1,8     | 3,7 - 1,2 |
| 2a (745)         | 3,9 - 1,4                            | 5,3 - 1,7     | 6,7 - 2,0     | 4,0 - 1,5 |
| 2b (745)         | 4,5 - 1,8                            | 6,0 - 2,1     | 7,3 - 2,4     | 4,7 - 2,0 |
| 3 (766)          | 5,1 - 1,8                            | 6,6 - 2,3     | 7,9 - 2,6     | 5,3 - 2,0 |
| 4 (767)          | 6,2 - 2,0                            | 7,7 - 2,4     | 9,0 - 2,7     | 6,4 - 2,2 |
| 5 (769)          | 6,2 - 2,0                            | 10,3 - 2,8    | 11,2 - 3,1    | 8,6 - 2,6 |

Abmessungen in mm  
Dimensions in mm

**Keramische Miniatur-Scheibenkondensatoren, Klasse 1B**  
**Miniature ceramic plate capacitors, class 1B**

**RO.**

**Nennspannung / Rated voltage = 100 V-**

| Kapazität<br>Capacitance:<br>pF | Keramikart / Ceramic material: <b>P 100</b><br>Toleranz/Tolerance: $\pm 0,25$ pF; $\pm 2\%$ |               |               |                                     | Keramikart / Ceramic material: <b>NPO</b><br>Toleranz / Tolerance: $\pm 0,25$ pF; $\pm 2\%$ |               |      |                                     | Keramikart / Ceramic material: <b>N075<sup>1)</sup></b><br>Toleranz / Tolerance: $\pm 0,25$ pF; $\pm 2\%$ |               |      |                                     |
|---------------------------------|---------------------------------------------------------------------------------------------|---------------|---------------|-------------------------------------|---------------------------------------------------------------------------------------------|---------------|------|-------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------|------|-------------------------------------|
|                                 | Größe<br>Size                                                                               | Tol.          | Code          | Bestellbezeichnung<br>Ordering Code | Größe<br>Size                                                                               | Tol.          | Code | Bestellbezeichnung<br>Ordering Code | Größe<br>Size                                                                                             | Tol.          | Code | Bestellbezeichnung<br>Ordering Code |
| 0,56                            | 1***                                                                                        |               |               | ROA 856 CAK □□□ J                   |                                                                                             |               |      |                                     |                                                                                                           |               |      |                                     |
| 0,68                            | 1**                                                                                         |               |               | ROA 868 CAK □□□ J                   |                                                                                             |               |      |                                     |                                                                                                           |               |      |                                     |
| 0,82                            | 1*                                                                                          |               |               | ROA 882 CAK □□□ J                   |                                                                                             |               |      |                                     |                                                                                                           |               |      |                                     |
| 1                               | 1*                                                                                          |               |               | ROA 910 CAK □□□ J                   |                                                                                             |               |      |                                     |                                                                                                           |               |      |                                     |
| 1,2                             | 1                                                                                           |               |               | ROA 912 CAK □□□ J                   |                                                                                             |               |      |                                     |                                                                                                           |               |      |                                     |
| 1,5                             | 1                                                                                           |               |               | ROA 915 CAK □□□ J                   |                                                                                             |               |      |                                     |                                                                                                           |               |      |                                     |
| 1,8                             | 1                                                                                           |               |               | ROA 918 CAK □□□ J                   | 1                                                                                           |               |      | ROC 918 CAK □□□ J                   |                                                                                                           |               |      |                                     |
| 2,2                             | 1                                                                                           |               |               | ROA 922 CAK □□□ J                   | 1                                                                                           |               |      | ROC 922 CAK □□□ J                   |                                                                                                           |               |      |                                     |
| 2,7                             | 1                                                                                           |               |               | ROA 927 CAK □□□ J                   | 1                                                                                           |               |      | ROC 927 CAK □□□ J                   |                                                                                                           |               |      |                                     |
| 3,3                             | 1                                                                                           | $\pm 0,25$ pF |               | ROA 933 CAK □□□ J                   | 1                                                                                           | $\pm 0,25$ pF |      | ROC 933 CAK □□□ J                   |                                                                                                           | $\pm 0,25$ pF |      |                                     |
| 3,9                             | 1                                                                                           |               | rot + violett | ROA 939 CAK □□□ J                   | 1                                                                                           |               |      | ROC 939 CAK □□□ J                   | 1                                                                                                         |               |      | ROL 939 CAK □□□ J                   |
| 4,7                             | 1                                                                                           |               |               | ROA 947 CAK □□□ J                   | 1                                                                                           |               |      | ROC 947 CAK □□□ J                   | 1                                                                                                         |               |      | ROL 947 CAK □□□ J                   |
| 5,6                             | 1                                                                                           |               |               | ROA 956 CAK □□□ J                   | 1                                                                                           |               |      | ROC 956 CAK □□□ J                   | 1                                                                                                         |               |      | ROL 956 CAK □□□ J                   |
| 6,8                             | 1                                                                                           |               |               | ROA 968 CAK □□□ J                   | 1                                                                                           |               |      | ROC 968 CAK □□□ J                   | 1                                                                                                         |               |      | ROL 968 CAK □□□ J                   |
| 8,2                             | 2a                                                                                          |               |               | ROA 982 CAK □□□ J                   | 1                                                                                           |               |      | ROC 982 CAK □□□ J                   | 1                                                                                                         |               |      | ROL 982 CAK □□□ J                   |
| 10                              | 2a                                                                                          |               | red + violett | ROA 100 GAK □□□ J                   | 1                                                                                           |               |      | ROC 100 GAK □□□ J                   | 1                                                                                                         |               |      | ROL 100 GAK □□□ J                   |
| 12                              | 2b                                                                                          |               |               | ROA 120 GAK □□□ J                   | 1                                                                                           |               |      | ROC 120 GAK □□□ J                   | 1                                                                                                         |               |      | ROL 120 GAK □□□ J                   |
| 15                              | 2b                                                                                          |               |               | ROA 150 GAK □□□ J                   | 1                                                                                           |               |      | ROC 150 GAK □□□ J                   | 1                                                                                                         |               |      | ROL 150 GAK □□□ J                   |
| 18                              | 3                                                                                           |               |               | ROA 180 GAK □□□ J                   | 1                                                                                           |               |      | ROC 180 GAK □□□ J                   | 1                                                                                                         |               |      | ROL 180 GAK □□□ J                   |
| 22                              | 3                                                                                           |               |               | ROA 220 GAK □□□ J                   | 1                                                                                           |               |      | ROC 220 GAK □□□ J                   | 2a                                                                                                        |               |      | ROL 220 GAK □□□ J                   |
| 27                              | 4                                                                                           |               |               | ROA 270 GAK □□□ J                   | 1                                                                                           |               |      | ROC 270 GAK □□□ J                   | 2a                                                                                                        |               |      | ROL 270 GAK □□□ J                   |
| 33                              | 4                                                                                           | $\pm 2\%$     |               | ROA 330 GAK □□□ J                   | 1                                                                                           | $\pm 2\%$     |      | ROC 330 GAK □□□ J                   | 2b                                                                                                        | $\pm 2\%$     |      | ROL 330 GAK □□□ J                   |
| 39                              | 5                                                                                           |               |               | ROA 390 GAK □□□ J                   | 2a                                                                                          |               |      | ROC 390 GAK □□□ J                   | 2b                                                                                                        |               |      | ROL 390 GAK □□□ J                   |
| 47                              | 5                                                                                           |               |               | ROA 470 GAK □□□ J                   | 2a                                                                                          |               |      | ROC 470 GAK □□□ J                   | 3                                                                                                         |               |      | ROL 470 GAK □□□ J                   |
| 56                              |                                                                                             |               |               |                                     | 2a                                                                                          |               |      | ROC 560 GAK □□□ J                   | 3                                                                                                         |               |      | ROL 560 GAK □□□ J                   |
| 68                              |                                                                                             |               |               |                                     | 2b                                                                                          |               |      | ROC 680 GAK □□□ J                   | 4                                                                                                         |               |      | ROL 680 GAK □□□ J                   |
| 82                              |                                                                                             |               |               |                                     | 2b                                                                                          |               |      | ROC 820 GAK □□□ J                   | 4                                                                                                         |               |      | ROL 820 GAK □□□ J                   |
| 100                             |                                                                                             |               |               |                                     | 3                                                                                           |               |      | ROC 101 GAK □□□ J                   | 5                                                                                                         |               |      | ROL 101 GAK □□□ J                   |
| 120                             |                                                                                             |               |               |                                     | 3                                                                                           |               |      | ROC 121 GAK □□□ J                   | 5                                                                                                         |               |      | ROL 121 GAK □□□ J                   |
| 150                             |                                                                                             |               |               |                                     | 4                                                                                           |               |      | ROC 151 GAK □□□ J                   |                                                                                                           |               |      |                                     |
| 180                             |                                                                                             |               |               |                                     | 4                                                                                           |               |      | ROC 181 GAK □□□ J                   |                                                                                                           |               |      |                                     |
| 220                             |                                                                                             |               |               |                                     | 5                                                                                           |               |      | ROC 221 GAK □□□ J                   |                                                                                                           |               |      |                                     |

<sup>1)</sup> Mindestbestellmenge 50.000 Stück pro Wert.  
Die Vorzugstypenreihen sind unterstrichen.  
Minimum order quantity = 50.000 pcs. per value.  
The preferred dielectrics are underlined.

\* s ≤ 2,5 mm  
\*\* s ≤ 2,7 mm  
\*\*\* s ≤ 3,0 mm

□□□ **Bestellbezeichnung 10./11. und 12. Stelle:** siehe Maßbild I ... V, Seite 32 für Schüttgut  
Seite 21 für gegurtete Ausführung

**Ordering code 10th/11th und 12th digit:** see figure I ... V,

page 32 for bulk version  
page 21 for taped version

**Keramische Miniatur-Scheibenkondensatoren, Klasse 1B**  
**Miniature ceramic plate capacitors, class 1B**

**RO .**

**Nennspannung / Rated voltage = 100 V–**

| Kapazität<br>Capacitance: |               | Keramikart / Ceramic material: N 150<br>Toleranz/Tolerance: ± 0,25 pF; ± 2% |        |                                     |               | Keramikart / Ceramic material: N 220 <sup>1)</sup><br>Toleranz / Tolerance: ± 0,25 pF; ± 2% |                |                                     |               | Keramikart / Ceramic material: N 330 <sup>1)</sup><br>Toleranz / Tolerance: ± 0,25 pF; ± 2% |               |                                     |  |
|---------------------------|---------------|-----------------------------------------------------------------------------|--------|-------------------------------------|---------------|---------------------------------------------------------------------------------------------|----------------|-------------------------------------|---------------|---------------------------------------------------------------------------------------------|---------------|-------------------------------------|--|
| pF                        | Größe<br>Size | Tol.                                                                        | Code   | Bestellbezeichnung<br>Ordering Code | Größe<br>Size | Tol.                                                                                        | Code           | Bestellbezeichnung<br>Ordering Code | Größe<br>Size | Tol.                                                                                        | Code          | Bestellbezeichnung<br>Ordering Code |  |
| 3,9                       | 1*            | ±0,25 pF                                                                    |        | ROP 939 CAK □□□ J                   | 1*            | ±0,25 pF                                                                                    |                | ROR 939 CAK □□□ J                   |               | ±0,25 pF                                                                                    |               |                                     |  |
| 4,7                       | 1             |                                                                             |        | ROP 947 CAK □□□ J                   | 1             |                                                                                             |                | ROR 947 CAK □□□ J                   | 1             |                                                                                             |               | ROS 947 CAK □□□ J                   |  |
| 5,6                       | 1             |                                                                             |        | ROP 956 CAK □□□ J                   | 1             |                                                                                             |                | ROR 956 CAK □□□ J                   | 1             |                                                                                             |               | ROS 956 CAK □□□ J                   |  |
| 6,8                       | 1             |                                                                             |        | ROP 968 CAK □□□ J                   | 1             |                                                                                             |                | ROR 968 CAK □□□ J                   | 1             |                                                                                             |               | ROS 968 CAK □□□ J                   |  |
| 8,2                       | 1             |                                                                             |        | ROP 982 CAK □□□ J                   | 1             |                                                                                             |                | ROR 982 CAK □□□ J                   | 1             |                                                                                             |               | ROS 982 CAK □□□ J                   |  |
| 10                        | 1             | ± 2%                                                                        | orange | ROP 100 GAK □□□ J                   | 1             | ± 2%                                                                                        | gelb<br>yellow | ROR 100 GAK □□□ J                   | 1             | ± 2%                                                                                        | grün<br>green | ROS 100 GAK □□□ J                   |  |
| 12                        | 1             |                                                                             |        | ROP 120 GAK □□□ J                   | 1             |                                                                                             |                | ROR 120 GAK □□□ J                   | 1             |                                                                                             |               | ROS 120 GAK □□□ J                   |  |
| 15                        | 1             |                                                                             |        | ROP 150 GAK □□□ J                   | 1             |                                                                                             |                | ROR 150 GAK □□□ J                   | 1             |                                                                                             |               | ROS 150 GAK □□□ J                   |  |
| 18                        | 1             |                                                                             |        | ROP 180 GAK □□□ J                   | 1             |                                                                                             |                | ROR 180 GAK □□□ J                   | 1             |                                                                                             |               | ROS 180 GAK □□□ J                   |  |
| 22                        | 1             |                                                                             |        | ROP 220 GAK □□□ J                   | 1             |                                                                                             |                | ROR 220 GAK □□□ J                   | 1             |                                                                                             |               | ROS 220 GAK □□□ J                   |  |
| 27                        | 1             |                                                                             |        | ROP 270 GAK □□□ J                   | 2a            |                                                                                             |                | ROR 270 GAK □□□ J                   | 1             |                                                                                             |               | ROS 270 GAK □□□ J                   |  |
| 33                        | 1             |                                                                             |        | ROP 330 GAK □□□ J                   | 2a            |                                                                                             |                | ROR 330 GAK □□□ J                   | 2a            |                                                                                             |               | ROS 330 GAK □□□ J                   |  |
| 39                        | 2a            |                                                                             |        | ROP 390 GAK □□□ J                   | 2b            |                                                                                             |                | ROR 390 GAK □□□ J                   | 2a            |                                                                                             |               | ROS 390 GAK □□□ J                   |  |
| 47                        | 2a            |                                                                             |        | ROP 470 GAK □□□ J                   | 2b            |                                                                                             |                | ROR 470 GAK □□□ J                   | 2b            |                                                                                             |               | ROS 470 GAK □□□ J                   |  |
| 56                        | 2b            |                                                                             |        | ROP 560 GAK □□□ J                   | 3             |                                                                                             |                | ROR 560 GAK □□□ J                   | 2b            |                                                                                             |               | ROS 560 GAK □□□ J                   |  |
| 68                        | 2b            |                                                                             |        | ROP 680 GAK □□□ J                   | 3             |                                                                                             |                | ROR 680 GAK □□□ J                   | 3             |                                                                                             |               | ROS 680 GAK □□□ J                   |  |
| 82                        | 3             |                                                                             |        | ROP 820 GAK □□□ J                   | 4             |                                                                                             |                | ROR 820 GAK □□□ J                   | 3             |                                                                                             |               | ROS 820 GAK □□□ J                   |  |
| 100                       | 3             |                                                                             |        | ROP 101 GAK □□□ J                   | 4             |                                                                                             |                | ROR 101 GAK □□□ J                   | 4             |                                                                                             |               | ROS 101 GAK □□□ J                   |  |
| 120                       | 4             |                                                                             |        | ROP 121 GAK □□□ J                   | 5             |                                                                                             |                | ROR 121 GAK □□□ J                   | 4             |                                                                                             |               | ROS 121 GAK □□□ J                   |  |
| 150                       | 4             |                                                                             |        | ROP 151 GAK □□□ J                   | 5             |                                                                                             |                | ROR 151 GAK □□□ J                   | 5             |                                                                                             |               | ROS 151 GAK □□□ J                   |  |
| 180                       | 4             |                                                                             |        | ROP 181 GAK □□□ J                   |               |                                                                                             |                |                                     | 5             |                                                                                             |               | ROS 181 GAK □□□ J                   |  |
| 220                       | 5             |                                                                             |        | ROP 221 GAK □□□ J                   |               |                                                                                             |                |                                     |               |                                                                                             |               |                                     |  |

<sup>1)</sup> Mindestbestellmenge 50.000 Stück pro Wert. \* s ≤ 2,5 mm  
Die Vorzugstypenreihen sind unterstrichen.  
Minimum order quantity = 50.000 pcs. per value.  
The preferred dielectrics are underlined.

□□□ **Bestellbezeichnung 10./11. und 12. Stelle:** siehe Maßbild I ... V, Seite 32 für Schüttgut  
Seite 21 für gegurtete Ausführung

**Ordering code 10th/11th und 12th digit:** see figure I ... V, page 32 for bulk version  
page 21 for taped version

**Keramische Miniatur-Scheibenkondensatoren, Klasse 1B**  
**Miniature ceramic plate capacitors, class 1B**

**RO.**

**Nennspannung / Rated voltage = 100 V–**

| Kapazität<br>Capacitance:<br>pF | Keramikart / Ceramic material: N 470 <sup>1)</sup><br>Toleranz/Tolerance: ± 0,25 pF; ± 2% |          |              |                                     | Keramikart / Ceramic material: N 750<br>Toleranz / Tolerance: ± 0,25 pF; ± 2% |          |                   |                                     | Keramikart / Ceramic material: N 1500 <sup>1)</sup><br>Toleranz / Tolerance: ± 2% |      |                       |                                     |
|---------------------------------|-------------------------------------------------------------------------------------------|----------|--------------|-------------------------------------|-------------------------------------------------------------------------------|----------|-------------------|-------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------|-------------------------------------|
|                                 | Größe<br>Size                                                                             | Tol.     | Code         | Bestellbezeichnung<br>Ordering Code | Größe<br>Size                                                                 | Tol.     | Code              | Bestellbezeichnung<br>Ordering Code | Größe<br>Size                                                                     | Tol. | Code                  | Bestellbezeichnung<br>Ordering Code |
| 3,9                             |                                                                                           |          |              |                                     | 1                                                                             |          |                   | ROU 939 CAK □□□ J                   |                                                                                   |      |                       |                                     |
| 4,7                             |                                                                                           |          |              |                                     | 1                                                                             |          |                   | ROU 947 CAK □□□ J                   |                                                                                   |      |                       |                                     |
| 5,6                             |                                                                                           |          |              |                                     | 1                                                                             |          |                   | ROU 956 CAK □□□ J                   |                                                                                   |      |                       |                                     |
| 6,8                             | 1                                                                                         | ±0,25 pF |              | ROT 968 CAK □□□ J                   | 1                                                                             | ±0,25 pF |                   | ROU 968 CAK □□□ J                   |                                                                                   |      |                       |                                     |
| 8,2                             | 1                                                                                         |          |              | ROT 982 CAK □□□ J                   | 1                                                                             |          |                   | ROU 982 CAK □□□ J                   |                                                                                   |      |                       |                                     |
| 10                              | 1                                                                                         |          |              | ROT 100 GAK □□□ J                   | 1                                                                             |          |                   | ROU 100 GAK □□□ J                   |                                                                                   |      |                       |                                     |
| 12                              | 1                                                                                         |          |              | ROT 120 GAK □□□ J                   | 1                                                                             |          |                   | ROU 120 GAK □□□ J                   |                                                                                   |      |                       |                                     |
| 15                              | 1                                                                                         |          |              | ROT 150 GAK □□□ J                   | 1                                                                             |          |                   | ROU 150 GAK □□□ J                   |                                                                                   |      |                       |                                     |
| 18                              | 1                                                                                         |          |              | ROT 180 GAK □□□ J                   | 1                                                                             |          |                   | ROU 180 GAK □□□ J                   | 1*                                                                                |      |                       | ROV 180 GAK □□□ J                   |
| 22                              | 1                                                                                         |          |              | ROT 220 GAK □□□ J                   | 1                                                                             |          |                   | ROU 220 GAK □□□ J                   | 1                                                                                 |      |                       | ROV 220 GAK □□□ J                   |
| 27                              | 1                                                                                         | ± 2%     | blau<br>blue | ROT 270 GAK □□□ J                   | 1                                                                             | ± 2%     | violett<br>violet | ROU 270 GAK □□□ J                   | 1                                                                                 |      |                       | ROV 270 GAK □□□ J                   |
| 33                              | 1                                                                                         |          |              | ROT 330 GAK □□□ J                   | 1                                                                             |          |                   | ROU 330 GAK □□□ J                   | 1                                                                                 |      |                       | ROV 330 GAK □□□ J                   |
| 39                              | 2a                                                                                        |          |              | ROT 390 GAK □□□ J                   | 1                                                                             |          |                   | ROU 390 GAK □□□ J                   | 1                                                                                 |      |                       | ROV 390 GAK □□□ J                   |
| 47                              | 2a                                                                                        |          |              | ROT 470 GAK □□□ J                   | 1                                                                             |          |                   | ROU 470 GAK □□□ J                   | 1                                                                                 |      |                       | ROV 470 GAK □□□ J                   |
| 56                              | 2b                                                                                        |          |              | ROT 560 GAK □□□ J                   | 2a                                                                            |          |                   | ROU 560 GAK □□□ J                   | 1                                                                                 |      |                       | ROV 560 GAK □□□ J                   |
| 68                              | 2b                                                                                        |          |              | ROT 680 GAK □□□ J                   | 2a                                                                            |          |                   | ROU 680 GAK □□□ J                   | 1                                                                                 |      |                       | ROV 680 GAK □□□ J                   |
| 82                              | 3                                                                                         |          |              | ROT 820 GAK □□□ J                   | 2b                                                                            |          |                   | ROU 820 GAK □□□ J                   | 1                                                                                 |      |                       | ROV 820 GAK □□□ J                   |
| 100                             | 3                                                                                         |          |              | ROT 101 GAK □□□ J                   | 2b                                                                            |          |                   | ROU 101 GAK □□□ J                   | 2a                                                                                | ± 2% | orange<br>+<br>orange | ROV 101 GAK □□□ J                   |
| 120                             | 4                                                                                         |          |              | ROT 121 GAK □□□ J                   | 3                                                                             |          |                   | ROU 121 GAK □□□ J                   | 2a                                                                                |      |                       | ROV 121 GAK □□□ J                   |
| 150                             | 4                                                                                         |          |              | ROT 151 GAK □□□ J                   | 3                                                                             |          |                   | ROU 151 GAK □□□ J                   | 2b                                                                                |      |                       | ROV 151 GAK □□□ J                   |
| 180                             | 5                                                                                         |          |              | ROT 181 GAK □□□ J                   | 4                                                                             |          |                   | ROU 181 GAK □□□ J                   | 2b                                                                                |      |                       | ROV 181 GAK □□□ J                   |
| 220                             | 5                                                                                         |          |              | ROT 221 GAK □□□ J                   | 4                                                                             |          |                   | ROU 221 GAK □□□ J                   | 3                                                                                 |      |                       | ROV 221 GAK □□□ J                   |
| 270                             |                                                                                           |          |              |                                     | 5                                                                             |          |                   | ROU 271 GAK □□□ J                   | 4                                                                                 |      |                       | ROV 271 GAK □□□ J                   |
| 330                             |                                                                                           |          |              |                                     | 5                                                                             |          |                   | ROU 331 GAK □□□ J                   | 4                                                                                 |      |                       | ROV 331 GAK □□□ J                   |
| 390                             |                                                                                           |          |              |                                     |                                                                               |          |                   |                                     | 4                                                                                 |      |                       | ROV 391 GAK □□□ J                   |
| 470                             |                                                                                           |          |              |                                     |                                                                               |          |                   |                                     | 5                                                                                 |      |                       | ROV 471 GAK □□□ J                   |
| 560                             |                                                                                           |          |              |                                     |                                                                               |          |                   |                                     | 5                                                                                 |      |                       | ROV 561 GAK □□□ J                   |

<sup>1)</sup> Mindestbestellmenge 50.000 Stück pro Wert. \* s ≤ 2,5 mm  
Die Vorzugstypenreihen sind unterstrichen.  
Minimum order quantity = 50.000 pcs. per value.  
The preferred dielectrics are underlined.

□□□ **Bestellbezeichnung 10./11. und 12. Stelle:** siehe Maßbild I ... V, Seite 32 für Schüttgut  
Seite 21 für gegurtete Ausführung

**Ordering code 10th/11th und 12th digit:** see figure I ... V, page 32 for bulk version  
page 21 for taped version

**Bestellbeispiel**  
**Ordering example:** ROA 910 C AK "AWS" J  
Kds.-Reihe C-Wert C-Toleranz Spg. Ausführung Code  
Series C-value C-tolerance Rated voltage Design

## Keramische Miniatur-Scheibenkondensatoren, Klasse 2 Miniature ceramic plate capacitors, class 2

RO .

### Ausführung / Design:

Rechteck-Kondensator mit Phenolharz-  
umhüllung

Rectangular capacitor with phenol  
resin coating

**ROZ** | **ROE** | **ROY**

### Nennspannung $U_N$ / Rated voltage $U_R$ :

100 V- | 40 V-  
(63 V- bei / at  
(-10... +55)°C)

### Prüfspannung $U_P$ / Test voltage $U_T$ :

300 V- | 200 V-

### Verlustfaktor $\tan \delta$

#### Dissipation factor $\tan \delta$ :

$\leq 35 \cdot 10^{-3}$   
(bei / at 1 kHz, 1,2 V)

### Isolationswiderstand $R_{is}$

#### Insulation resistance $R_i$ :

$\geq 4 \cdot 10^9 \Omega$

### Temperatur-Charakteristik

#### nach CECC 30 700

#### Temperature characteristic acc.

#### to CECC 30 700:

2 C 2 | 2 E 2 | -  
(K 2000) | (K 5000) | (K 14 000)

### Betriebstemperatur $\vartheta_u$

#### Category temperature range $\vartheta_u$ :

(-55...+85)°C | (-25...+85)°C

### Klimatische Anwendungsklasse

#### nach DIN 40 040

#### Climatic application class acc.

#### to DIN 40 040:

FPF | -

### Klimatische Prüfklasse

#### nach DIN 40 045

#### Climatic testing class acc.

#### to DIN 40 045:

55/085/21 | -

### Umhüllung / Coating:

Phenolharz, getaucht  
phenol resin, dipped

### Kennzeichnung / Marking:

|                     |                                                          |
|---------------------|----------------------------------------------------------|
| Kapazität           | Zifferncode gem.<br>DIN 40825 bzw. IEC 62                |
| Capacitance         | digit code according<br>DIN 40825<br>respectively IEC 62 |
| Keramikart          | durch Farbcode<br>an der Oberkante                       |
| Ceramic<br>material | with colour band<br>on the upper edge                    |

### Löthinweise / Soldering conditions:

Löttemperatur: 260°C ± 5°C

Lötzeit: max. 10 s

Soldering temperature: 260°C ± 5°C

Soldering time: max. 10 s

### Diagramme / Diagrams:

siehe Seite 8

see page 8

### Gurtung / Taping:

siehe Seite 21

see page 21

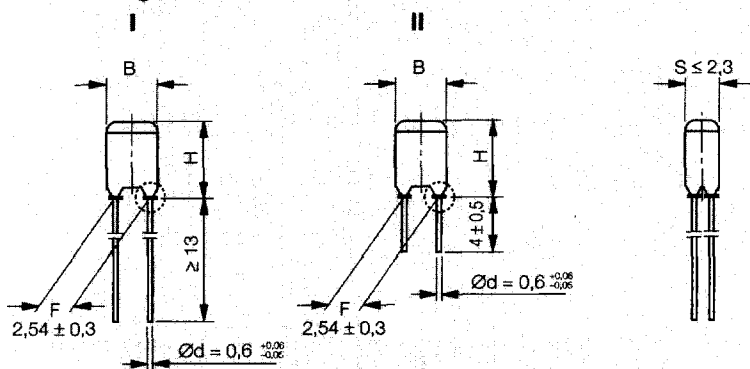
| Baugröße<br>Size | Drahtausführung / Lead configuration |               |               |           |
|------------------|--------------------------------------|---------------|---------------|-----------|
|                  | B                                    | H „AWS“/„AVS“ | H „BWS“/„BVS“ | H „AAO“   |
| 1 (744)          | 3,6 - 1,1                            | 5,0 - 1,5     | 6,3 - 1,8     | 3,7 - 1,2 |
| 2a (745)         | 3,9 - 1,4                            | 5,3 - 1,7     | 6,7 - 2,0     | 4,0 - 1,5 |
| 2b (745)         | 4,5 - 1,8                            | 6,0 - 2,1     | 7,3 - 2,4     | 4,7 - 2,0 |
| 3 (766)          | 5,1 - 1,8                            | 6,6 - 2,3     | 7,9 - 2,6     | 5,3 - 2,0 |
| 4 (767)          | 6,2 - 2,0                            | 7,7 - 2,4     | 9,0 - 2,7     | 6,4 - 2,2 |
| 5 (769)          | 6,2 - 2,0                            | 10,3 - 2,8    | 11,2 - 3,1    | 8,6 - 2,6 |

Abmessungen in mm

Dimensions in mm

RO.

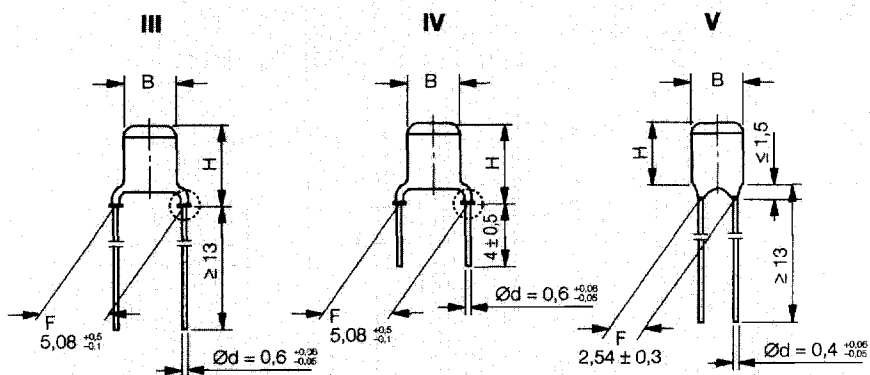
Maßbild / Figure



Bestellbezeichnung / Ordering code: 10./11./12. Stelle / digit:  
( ) = alte Bezeichnung / former code

„AWS“ (.11)

„AVS“ (J6)

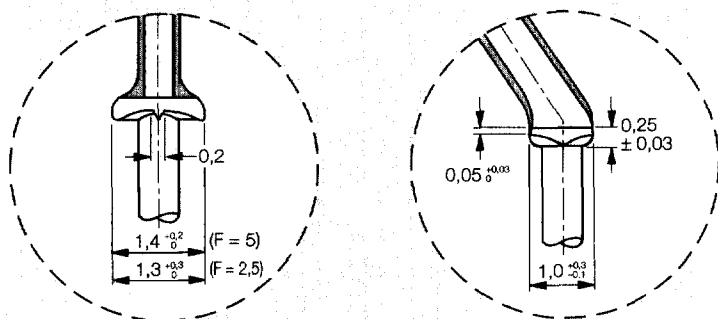


Bestellbezeichnung / Ordering code: 10./11./12. Stelle / digit:  
( ) = alte Bezeichnung / former code

„BWS“ (.14)

„BVS“ (FA)

„AAD“ (J4)



Abmessungen in mm  
Dimensions in mm

**Keramische Miniatur-Scheibenkondensatoren, Klasse 2**  
**Miniature ceramic plate capacitors, class 2**

**RO .**

| Nennspannung<br>Rated voltage = 100 V– |                                                                    |       |                |                                     |                                                                            |                   |              | Nennspannung<br>Rated voltage = 40 V– |                                                                             |            |               |                                     |   |                   |
|----------------------------------------|--------------------------------------------------------------------|-------|----------------|-------------------------------------|----------------------------------------------------------------------------|-------------------|--------------|---------------------------------------|-----------------------------------------------------------------------------|------------|---------------|-------------------------------------|---|-------------------|
| Kapazität<br>Capacitance:              | Keramikart / Ceramic material: K 2000<br>Toleranz/Tolerance: ± 10% |       |                |                                     | Keramikart / Ceramic material: K 5000<br>Toleranz / Tolerance: (+ 50/–20)% |                   |              |                                       | Keramikart / Ceramic material: K 14000<br>Toleranz / Tolerance: (+ 80/–20)% |            |               |                                     |   |                   |
| pF/μF                                  | Größe<br>Size                                                      | Tol.  | Code           | Bestellbezeichnung<br>Ordering Code | Größe<br>Size                                                              | Tol.              | Code         | Bestellbezeichnung<br>Ordering Code   | Größe<br>Size                                                               | Tol.       | Code          | Bestellbezeichnung<br>Ordering Code |   |                   |
| 180 pF                                 | 1                                                                  | ± 10% | gelb<br>yellow | ROZ 181 KAK □□□ J                   | 1                                                                          | (+50/–20)%        | blau<br>blue |                                       | 1                                                                           | (+80/–20)% | grün<br>green |                                     |   |                   |
| <b>220</b>                             | 1                                                                  |       |                | ROZ 221 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| 270                                    | 1                                                                  |       |                | ROZ 271 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>330</b>                             | 1                                                                  |       |                | ROZ 331 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| 390                                    | 1                                                                  |       |                | ROZ 391 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>470</b>                             | 1                                                                  |       |                | ROZ 471 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| 560                                    | 1                                                                  |       |                | ROZ 561 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>680</b>                             | 1                                                                  |       |                | ROZ 681 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| 820                                    | 1                                                                  |       |                | ROZ 821 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>1000</b>                            | 1                                                                  |       |                | ROZ 102 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               | ROE 102 SAK □□□ J                   |   | ROY 102 ZAG □□□ J |
| 1200                                   | 2a                                                                 |       |                | ROZ 122 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>1500</b>                            | 2a                                                                 |       |                | ROZ 152 KAK □□□ J                   |                                                                            |                   |              | 1                                     |                                                                             |            |               | ROE 152 SAK □□□ J                   |   |                   |
| 1800                                   | 2b                                                                 |       |                | ROZ 182 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>2200</b>                            | 2b                                                                 |       |                | ROZ 222 KAK □□□ J                   |                                                                            |                   |              | 1                                     |                                                                             |            |               | ROE 222 SAK □□□ J                   | 1 | ROY 222 ZAG □□□ J |
| 2700                                   | 3                                                                  |       |                | ROZ 272 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>3300</b>                            | 3                                                                  |       |                | ROZ 332 KAK □□□ J                   |                                                                            |                   |              | 2a                                    |                                                                             |            |               | ROE 332 SAK □□□ J                   |   |                   |
| 3900                                   | 4                                                                  |       |                | ROZ 392 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>4700</b>                            | 4                                                                  |       |                | ROZ 472 KAK □□□ J                   |                                                                            |                   |              | 2b                                    |                                                                             |            |               | ROE 472 SAK □□□ J                   | 1 | ROY 472 ZAG □□□ J |
| 5600                                   | 5                                                                  |       |                | ROZ 562 KAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| 6800                                   | 5                                                                  |       |                | ROZ 682 KAK □□□ J                   |                                                                            |                   |              | 3                                     |                                                                             |            |               | ROE 682 SAK □□□ J                   |   |                   |
| <b>0,01</b> μF                         |                                                                    |       | 4              | ROE 103 SAK □□□ J                   | 2b                                                                         | ROY 103 ZAG □□□ J |              |                                       |                                                                             |            |               |                                     |   |                   |
| 0,015                                  |                                                                    |       | 5              | ROE 153 SAK □□□ J                   |                                                                            |                   |              |                                       |                                                                             |            |               |                                     |   |                   |
| <b>0,022</b>                           |                                                                    |       |                |                                     | 4                                                                          | ROY 223 ZAG □□□ J |              |                                       |                                                                             |            |               |                                     |   |                   |
| 0,047                                  |                                                                    |       |                |                                     | 5                                                                          | ROY 473 ZAG □□□ J |              |                                       |                                                                             |            |               |                                     |   |                   |

**Hinweis:** Die Vorzugs-Kapazitätswerte sind **fettgedruckt**.

**Note:** The preferred C-values are **in bold print**.

□□□ **Bestellbezeichnung 10./11. und 12. Stelle:** siehe Maßbild I ... V, Seite 38 für Schüttgut  
Seite 21 für gegurtete Ausführung

**Ordering code 10th/11th und 12th digit:** see figure I ... V, page 38 for bulk version  
page 21 for taped version

**Bestellbeispiel**

**Ordering example:** ROZ 181 K AK "AWS" J  
Kds.-Reihe C-Wert C-Toleranz Spg. Ausführung Code  
Series C-value C-tolerance Rated voltage Design