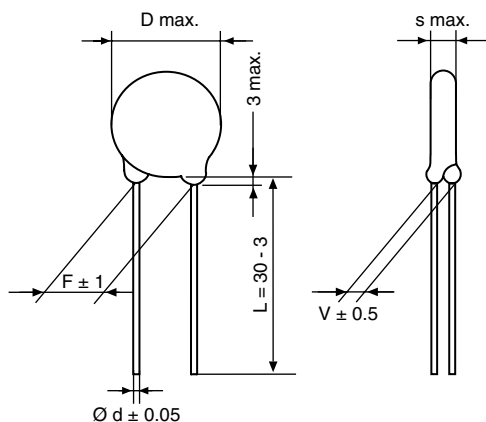


Ceramic Pulse Disc Capacitors, Class 2



Dimensions in mm

TEMPERATURE CHARACTERISTIC OF CAPACITANCE

See curve (next page)

CATEGORY TEMPERATURE RANGE (θ_A)

- 40 °C to + 125 °C

CLIMATIC CATEGORY TO EN60068-1

4/125/21

COATING

Epoxy dipped, insulating, flame retarding acc. to UL 94 V-0

TAPING AND SPECIAL LEAD CONFIGURATIONS

On request

FEATURES

- Compliant to RoHS directive 2002/95/EC

DESIGN

Disc capacitor with epoxy coating

RATED VOLTAGE (U_R)

| | |
|-----|---------------------|
| HAK | 1 kV _{DC} |
| HBK | 2 kV _{DC} |
| HCK | 3 kV _{DC} |
| HIK | 15 kV _{DC} |

DIELECTRIC STRENGTH BETWEEN LEADS

Component test

| | |
|-----|-----------------------------------|
| HAK | 2000 V _{AC} , 50 Hz, 2 s |
| HBK | 3000 V _{AC} , 50 Hz, 2 s |
| HCK | 4000 V _{AC} , 50 Hz, 2 s |
| HIK | 22 500 V _{DC} , 2 s |

DISSIPATION FACTOR ($\tan \delta$)

$\leq 5 \times 10^{-3}$

INSULATION RESISTANCE (I_R)

| | |
|---------------|---------------------------------|
| HAK, HBK, HCK | $\geq 10 \times 10^9 \Omega$ |
| HIK | $\geq 10 \times 10^{10} \Omega$ |

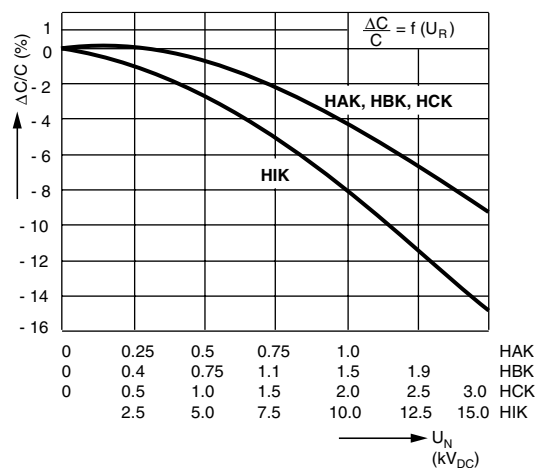
MARKING

- Capacitance value - Clear text
- Capacitance tolerance - With letter code
- Rated voltage - Clear text
- Manufacturers logo - Where $D \geq 11$ mm only
- Type designation - HAK, HBK, HCK only

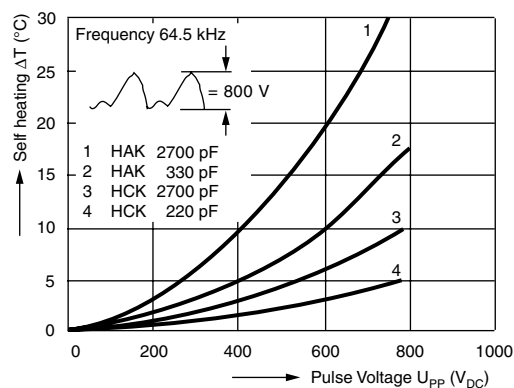


RoHS
COMPLIANT

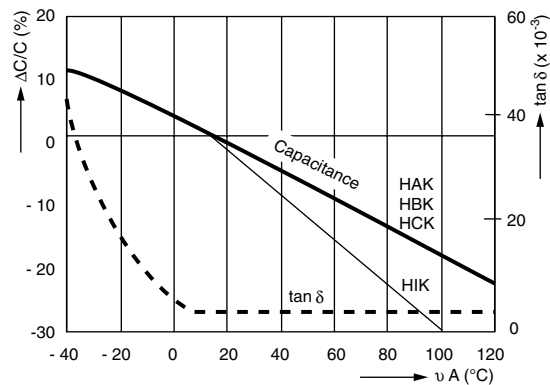
CAPACITANCE CHANGE VS. VOLTAGE



SELF HEATING



CAPACITANCE CHANGE AND DISSIPATION FACTOR VS. TEMPERATURE



ORDERING INFORMATION

| HIK | 471 | M | BJ | EE0 | K | R |
|-------|-------------------|-----------|---------------|--------------------|---------------|----------------|
| MODEL | CAPACITANCE VALUE | TOLERANCE | RATED VOLTAGE | LEAD CONFIGURATION | INTERNAL CODE | RoHS COMPLIANT |



| ORDERING INFORMATION, CERAMIC PULSE DISC CAPACITORS, 1 kV _{DC} | | | | | | | |
|---|---------------------------------------|---------------|------------------------------|---------------------------------|--------------------------------|-----------------|----------------|
| C (pF) | TOL. (%) | D x s (mm) | F ± 1 ⁽¹⁾ (mm) | d ± 0.05 ⁽¹⁾ (mm) | V ± 0.5 ⁽¹⁾ (mm) | CERAMIC CODE | ORDERING CODE |
| CLASS 2 K 1500 | | | | | | | |
| 100 | ± 20 % (± 10 %) ⁽²⁾ | 7.0 x 5.0 | 7.5 | 0.6 | 1.1 | | HAK101□BA□□□KR |
| 150 | | 7.0 x 5.0 | | | | | HAK151□BA□□□KR |
| 220 | | 7.0 x 5.0 | | | | | HAK221□BA□□□KR |
| 270 | | 7.0 x 5.0 | | | | | HAK271□BA□□□KR |
| 330 | | 7.0 x 5.0 | | | | | HAK331□BA□□□KR |
| 390 | | 7.0 x 5.0 | | | | | HAK391□BA□□□KR |
| 470 | | 7.0 x 5.0 | | | | | HAK471□BA□□□KR |
| 560 | | 8.0 x 5.0 | | | | | HAK561□BA□□□KR |
| 680 | | 8.0 x 5.0 | | | | | HAK681□BA□□□KR |
| 820 | | 9.0 x 5.0 | | | | | HAK821□BA□□□KR |
| 1000 | | 9.0 x 5.0 | | | | | HAK102□BA□□□KR |
| 1200 | | 10.0 x 5.0 | | | | | HAK122□BA□□□KR |
| 1500 | | 11.0 x 5.0 | | | | | HAK152□BA□□□KR |
| 1800 | | 12.0 x 5.0 | | | | | HAK182□BA□□□KR |
| 2200 | | 12.0 x 5.0 | | | | | HAK222□BA□□□KR |
| 2700 | | 14.5 x 5.0 | | | | | HAK272□BA□□□KR |
| 3300 | | 14.5 x 5.0 | | | | | HAK332□BA□□□KR |
| 3900 | | 15.5 x 5.0 | | | | | HAK392□BA□□□KR |
| 4700 | | 16.5 x 5.0 | | | | | HAK472□BA□□□KR |

| ORDERING INFORMATION, CERAMIC PULSE DISC CAPACITORS, 2 kV _{DC} | | | | | | | |
|---|---------------------------------------|---------------|------------------------------|---------------------------------|--------------------------------|-----------------|----------------|
| C (pF) | TOL. (%) | D x s (mm) | F ± 1 ⁽¹⁾ (mm) | d ± 0.05 ⁽¹⁾ (mm) | V ± 0.5 ⁽¹⁾ (mm) | CERAMIC CODE | ORDERING CODE |
| CLASS 2 K 1500 | | | | | | | |
| 100 | ± 20 % (± 10 %) ⁽²⁾ | 7.0 x 5.0 | 7.5 | 0.6 | 1.6 | | HBK101□BF□□□KR |
| 150 | | 7.0 x 5.0 | | | | | HBK151□BF□□□KR |
| 220 | | 7.0 x 5.0 | | | | | HBK221□BF□□□KR |
| 270 | | 7.0 x 5.0 | | | | | HBK271□BF□□□KR |
| 330 | | 7.0 x 5.0 | | | | | HBK331□BF□□□KR |
| 390 | | 8.0 x 5.0 | | | | | HBK391□BF□□□KR |
| 470 | | 8.0 x 5.0 | | | | | HBK471□BF□□□KR |
| 560 | | 9.0 x 5.0 | | | | | HBK561□BF□□□KR |
| 680 | | 9.0 x 5.0 | | | | | HBK681□BF□□□KR |
| 820 | | 10.0 x 5.0 | | | | | HBK821□BF□□□KR |
| 1000 | | 11.0 x 5.0 | | | | | HBK102□BF□□□KR |
| 1200 | | 11.0 x 5.0 | | | | | HBK122□BF□□□KR |
| 1500 | | 12.5 x 5.0 | | | | | HBK152□BF□□□KR |
| 1800 | | 14.5 x 5.0 | | | | | HBK182□BF□□□KR |
| 2200 | | 14.5 x 5.0 | | | | | HBK222□BF□□□KR |
| 2700 | | 16.5 x 5.0 | | | | | HBK272□BF□□□KR |
| 3300 | | 17.5 x 5.0 | | | | | HBK332□BF□□□KR |
| 3900 | | 19.5 x 5.0 | | | | | HBK392□BF□□□KR |
| 4700 | | 25.0 x 5.0 | | | | | HBK472□BF□□□KR |

Notes⁽¹⁾ Standard lead configuration, other lead spacing and diameter available on request.⁽²⁾ ± 10 % available on request.

| ORDERING CODE | | | |
|---------------|--------------------|--|--------------------------|
| □ | 7th digit | Capacitance tolerance | ± 10 % = K ± 20 % = M |
| □□□ | 10th to 12th digit | Lead configuration (See General Information) | |
| R | 14th digit | RoHS Compliant Component | |

| ORDERING INFORMATION, CERAMIC PULSE DISC CAPACITORS, 3 kV _{DC} | | | | | | | |
|---|-----------------------------------|------------|---------------------------|------------------------------|-----------------------------|--------------|----------------|
| C (pF) | TOL. (%) | D x s (mm) | F ± 1 ⁽¹⁾ (mm) | d ± 0.05 ⁽¹⁾ (mm) | V ± 0.5 ⁽¹⁾ (mm) | CERAMIC CODE | ORDERING CODE |
| CLASS 2 K 1500 | | | | | | | |
| 100 | ± 20 % (± 10 %) ⁽²⁾ | 7.0 x 5.0 | 10.0 | 0.6 | 1.1 | | HCK101□BC□□□KR |
| 150 | | 7.0 x 5.0 | | | | | HCK151□BC□□□KR |
| 220 | | 7.0 x 5.0 | | | | | HCK221□BC□□□KR |
| 270 | | 7.0 x 5.0 | | | | | HCK271□BC□□□KR |
| 330 | | 8.0 x 5.0 | | | | | HCK331□BC□□□KR |
| 390 | | 9.0 x 5.0 | | | | | HCK391□BC□□□KR |
| 470 | | 9.0 x 5.0 | | | | | HCK471□BC□□□KR |
| 560 | | 10.0 x 5.0 | | | | | HCK561□BC□□□KR |
| 680 | | 10.0 x 5.0 | | | | | HCK681□BC□□□KR |
| 820 | | 11.0 x 5.0 | | | | | HCK821□BC□□□KR |
| 1000 | | 12.0 x 5.0 | | | | | HCK102□BC□□□KR |
| 1200 | | 13.0 x 5.0 | | | | | HCK122□BC□□□KR |
| 1500 | | 15.0 x 5.0 | | | | | HCK152□BC□□□KR |
| 1800 | | 16.0 x 5.0 | | | | | HCK182□BC□□□KR |
| 2200 | | 17.0 x 5.0 | | | | | HCK222□BC□□□KR |
| 2700 | | 18.0 x 5.0 | | | | | HCK272□BC□□□KR |
| 3300 | | 20.0 x 5.0 | | | | | HCK332□BC□□□KR |

| ORDERING INFORMATION, CERAMIC PULSE DISC CAPACITORS, 15 kV _{DC} | | | | | | | |
|--|---------------------------------------|---------------|------------------------------|---------------------------------|--------------------------------|-----------------|----------------|
| C (pF) | TOL. (%) | D x s (mm) | F ± 1 ⁽¹⁾ (mm) | d ± 0.05 ⁽¹⁾ (mm) | V ± 0.5 ⁽¹⁾ (mm) | CERAMIC CODE | ORDERING CODE |
| CLASS 2 K 1500 | | | | | | | |
| 100 | ± 20 % (± 10 %) ⁽²⁾ | 8.0 x 8.0 | 12.5 | 0.6 | 5.0 | | HIK101□BJ□□□KR |
| 120 | | 9.0 x 8.0 | | | | | HIK121□BJ□□□KR |
| 150 | | 9.0 x 8.0 | | | | | HIK151□BJ□□□KR |
| 180 | | 10.0 x 8.0 | | | HIK181□BJ□□□KR | | |
| 220 | | 10.0 x 8.0 | | | HIK221□BJ□□□KR | | |
| 270 | | 11.0 x 8.0 | | | 5.2 | | HIK271□BJ□□□KR |
| 330 | | 11.5 x 8.0 | | | | | HIK331□BJ□□□KR |
| 390 | | 13.0 x 8.4 | | | | | HIK391□BJ□□□KR |
| 470 | | 15.0 x 8.4 | | | 5.4 | | HIK471□BJ□□□KR |
| 560 | | 15.0 x 8.4 | | | | | HIK561□BJ□□□KR |
| 680 | | 16.0 x 8.4 | | | | | HIK681□BJ□□□KR |
| 820 | | 18.5 x 8.4 | | | 5.6 | | HIK821□BJ□□□KR |
| 1000 | | 20.0 x 8.4 | | | | | HIK102□BJ□□□KR |
| 1200 | | 24.0 x 9.0 | | | 5.8 | | HIK122□BJ□□□KR |
| 1500 | | 24.0 x 9.0 | | | | | HIK152□BJ□□□KR |

Notes⁽¹⁾ Standard lead configuration, other lead spacing and diameter available on request.⁽²⁾ ± 10 % available on request.

| ORDERING CODE | | | |
|---------------|--------------------|--|--------------------------|
| □ | 7th digit | Capacitance tolerance | ± 10 % = K ± 20 % = M |
| □□□ | 10th to 12th digit | Lead configuration (see General Information) | |
| R | 14th digit | RoHS compliant component | |



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