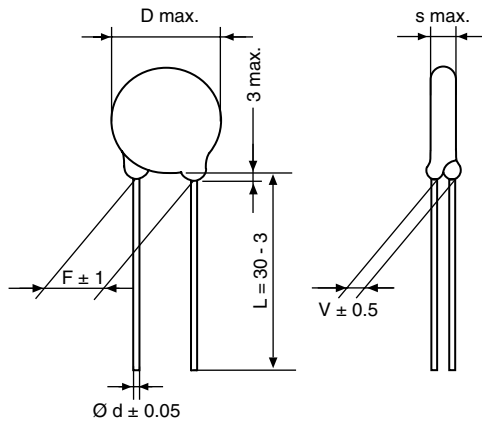


## Ceramic Pulse Disc Capacitors, Class 2



Dimensions in mm

### TEMPERATURE CHARACTERISTIC OF CAPACITANCE

See curve (next page)

### CATEGORY TEMPERATURE RANGE ( $\theta_A$ )

- 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 <sub>DC</sub>
HBK	2 kV <sub>DC</sub>
HCK	3 kV <sub>DC</sub>
HIK	15 kV <sub>DC</sub>

### DIELECTRIC STRENGTH BETWEEN LEADS

Component test

HAK	2000 V <sub>AC</sub> , 50 Hz, 2 s
HBK	3000 V <sub>AC</sub> , 50 Hz, 2 s
HCK	4000 V <sub>AC</sub> , 50 Hz, 2 s
HIK	22 500 V <sub>DC</sub> , 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	$\geq 10 \times 10^{10} \Omega$

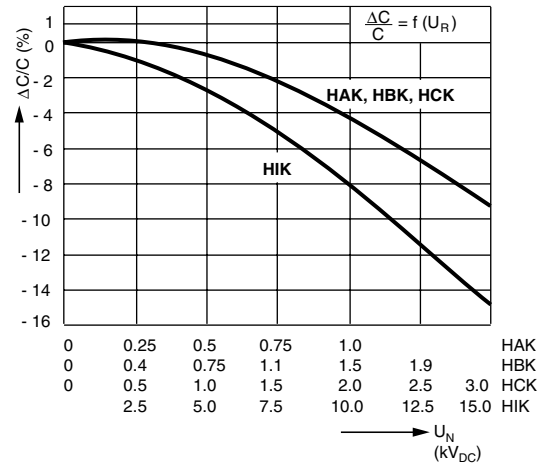
### MARKING

- 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

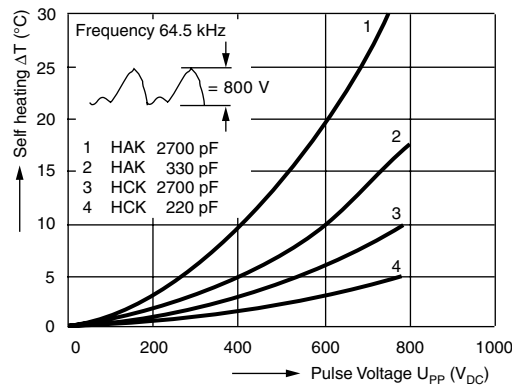


**RoHS**  
COMPLIANT

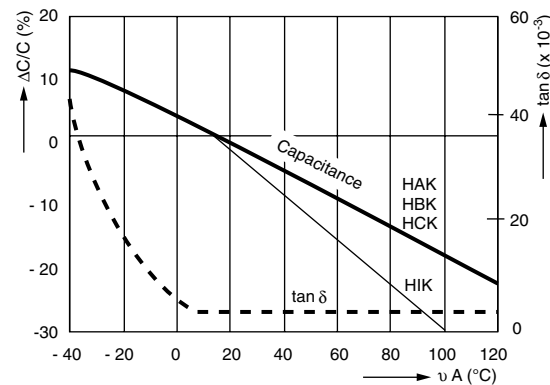
## CAPACITANCE CHANGE VS. VOLTAGE



## SELF HEATING



## CAPACITANCE CHANGE AND DISSIPATION FACTOR VS. TEMPERATURE



## ORDERING INFORMATION

<b>HIK</b>	<b>471</b>	<b>M</b>	<b>BJ</b>	<b>EE0</b>	<b>K</b>	<b>R</b>
MODEL	CAPACITANCE VALUE	TOLERANCE	RATED VOLTAGE	LEAD CONFIGURATION	INTERNAL CODE	RoHS COMPLIANT



ORDERING INFORMATION, CERAMIC PULSE DISC CAPACITORS, 1 kV <sub>DC</sub>							
C (pF)	TOL. (%)	D x s (mm)	F ± 1 <sup>(1)</sup> (mm)	d ± 0.05 <sup>(1)</sup> (mm)	V ± 0.5 <sup>(1)</sup> (mm)	CERAMIC CODE	ORDERING CODE
<b>CLASS 2 K 1500</b>							
100	± 20 % (± 10 %) <sup>(2)</sup>	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 <sub>DC</sub>							
C (pF)	TOL. (%)	D x s (mm)	F ± 1 <sup>(1)</sup> (mm)	d ± 0.05 <sup>(1)</sup> (mm)	V ± 0.5 <sup>(1)</sup> (mm)	CERAMIC CODE	ORDERING CODE
<b>CLASS 2 K 1500</b>							
100	± 20 % (± 10 %) <sup>(2)</sup>	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**

- <sup>(1)</sup> Standard lead configuration, other lead spacing and diameter available on request.
- <sup>(2)</sup> ± 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 <sub>DC</sub>							
C (pF)	TOL. (%)	D x s (mm)	F ± 1 <sup>(1)</sup> (mm)	d ± 0.05 <sup>(1)</sup> (mm)	V ± 0.5 <sup>(1)</sup> (mm)	CERAMIC CODE	ORDERING CODE
<b>CLASS 2 K 1500</b>							
100	± 20 % (± 10 %) <sup>(2)</sup>	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 <sub>DC</sub>							
C (pF)	TOL. (%)	D x s (mm)	F ± 1 <sup>(1)</sup> (mm)	d ± 0.05 <sup>(1)</sup> (mm)	V ± 0.5 <sup>(1)</sup> (mm)	CERAMIC CODE	ORDERING CODE
<b>CLASS 2 K 1500</b>							
100	± 20 % (± 10 %) <sup>(2)</sup>	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
1500		24.0 x 9.0			HIK152□BJ□□□KR		

**Notes**

- <sup>(1)</sup> Standard lead configuration, other lead spacing and diameter available on request.
- <sup>(2)</sup> ± 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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