

Ceramic High Voltage Disc Capacitors, Class 2

DESIGN:

Disc capacitor with epoxy coating

RATED VOLTAGE U_R :

HAZ, HAE, HAX	1kV _{DC}
HBZ, HBE, HBX	2kV _{DC}
HCZ, HCE, HCX	3kV _{DC}
HDE	4kV _{DC}
HEE	5kV _{DC}
HFZ, HFE	6kV _{DC}
HGZ	8kV _{DC}
HHZ	10kV _{DC}
HIZ	15kV _{DC}

DIELECTRIC STRENGTH BETWEEN LEADS:

Component test

HAZ, HAE, HAX	1750V _{DC} , 2s
HBZ, HBE, HBX	3000V _{DC} , 2s
HCZ, HCE, HCX	5000V _{DC} , 2s
HDE	6000V _{DC} , 2s
HEE	7500V _{DC} , 2s
HFZ, HFE	9000V _{DC} , 2s
HGZ	12000V _{DC} , 2s
HHZ	15000V _{DC} , 2s
HIZ	22500V _{DC} , 2s

DISSIPATION FACTOR $\tan \delta$:

HA., HB., HC., HD., HE	$\leq 25 \cdot 10^{-3}$
HF., HG., HH., HI.	$\leq 20 \cdot 10^{-3}$

INSULATION RESISTANCE R_{IS} :

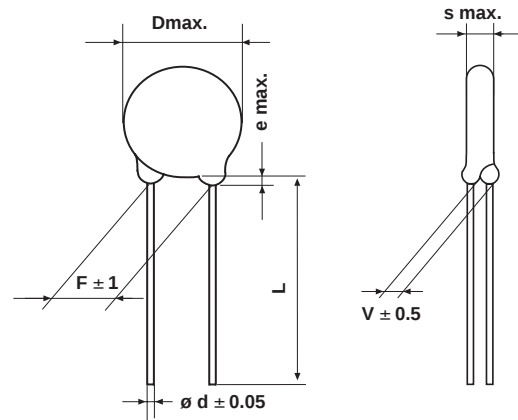
$\geq 1 \cdot 10^{10} \Omega$

CATEGORY TEMPERATURE RANGE θ_A :

(- 40 to + 85°C)

CLIMATIC CATEGORY ACC. TO EN 60068-1:

40 / 085 / 21



• Dimensions in mm

	Coating Extension e	Standard Lead Length L
HA., HB., HC.	3 max.	30 - 3
HD., HE., HF.,		or
HGZ, HHZ, HIZ	5 max.	10 ± 1

COATING:

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

TEMPERATURE CHARACTERISTIC OF CAPACITANCE:

See General Information

TAPING AND SPECIAL LEAD CONFIGURATIONS:

See General Information

MARKING:

Capacitance value	- Clear text
Capacitance tolerance	- Where D ≥ 9mm only
Rated voltage	- Clear text
Ceramic dielectric	- With Letter code
Manufacturers logo	- Where D ≥ 13mm only

ORDERING INFORMATION

HIZ	101	M	BJ	EJ0	K
MODEL	CAPACITANCE VALUE	TOLERANCE	RATED VOLTAGE	LEAD CONFIGURATION	INTERNAL CODE



	CERAMIC DIELECTRIC: CERAMIC CODE: CAPACITANCE TOLERANCE:				K 2000 Z ± 10%, ± 20%	CERAMIC DIELECTRIC: CERAMIC CODE: CAPACITANCE TOLERANCE:				K 6000 E ± 20%	CERAMIC DIELECTRIC: CERAMIC CODE: CAPACITANCE TOLERANCE:				K 10000 X + 50 -20%, (± 20%)**										
RATED VOLTAGE = 1kV _{DC}						RATED VOLTAGE = 1kV _{DC}						RATED VOLTAGE = 1kV _{DC}													
CAP. VALUE (pF)	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE										
47	7 x 3	5	0.6	1.2	HAZ470□BA□□□K																				
56	7 x 3				HAZ560□BA□□□K																				
68	7 x 3				HAZ680□BA□□□K																				
82	7 x 3				HAZ820□BA□□□K																				
100	7 x 3				HAZ101□BA□□□K																				
150	7 x 3				HAZ151□BA□□□K																				
220	7 x 3				HAZ221□BA□□□K																				
330	7 x 3				HAZ331□BA□□□K																				
470	7 x 3				HAZ471□BA□□□K																				
680	7 x 3				HAZ681□BA□□□K																				
1000	9 x 3				HAZ102□BA□□□K																				
1500	9 x 3				HAZ152□BA□□□K																				
2200	11 x 3	HAZ222□BA□□□K	5	0.6	1.2	HAE102MBA□□□K	7 x 3	5	0.6	1.2	HAX222SBA□□□K														
3300	13 x 3	HAZ332□BA□□□K				HAE332MBA□□□K					9 x 3	HAX332SBA□□□K													
4700	15 x 3	HAZ472□BA□□□K				HAE472MBA□□□K					9 x 3	HAX472SBA□□□K													
6800						HAE682MBA□□□K					13 x 3	7.5	0.6	1.2	HAX682SBA□□□K										
0.010μF					15 x 3	HAE103MBA□□□K	13 x 3	HAX103SBA□□□K																	
0.015μF									17 x 3	HAX153SBA□□□K															
0.022μF									18 x 3	HAX223SBA□□□K															
RATED VOLTAGE = 2kV _{DC}						RATED VOLTAGE = 2kV _{DC}						RATED VOLTAGE = 2kV _{DC}													
56	7 x 3	7.5	0.6	1.4	HBZ560□BB□□□K																				
68	7 x 3				HBZ680□BB□□□K																				
82	7 x 3				HBZ820□BB□□□K																				
100	7 x 3				HBZ101□BB□□□K																				
150	7 x 3				HBZ151□BB□□□K																				
220	7 x 3				HBZ221□BB□□□K																				
330	7 x 3				HBZ331□BB□□□K																				
470	7 x 3				HBZ471□BB□□□K																				
680	9 x 3				HBZ681□BB□□□K											7 x 3	7.5	0.6	1.4	HBE681MBB□□□K					
1000	9 x 3				HBZ102□BB□□□K											7 x 3				HBE102MBB□□□K					
1500	11 x 3				HBZ152□BB□□□K											9 x 3				HBE152MBB□□□K	7 x 3	7.5	0.6	1.2	HBX152SBB□□□K
2200	13 x 3				HBZ222□BB□□□K											9 x 3				HBE222MBB□□□K	9 x 3				HBX222SBB□□□K
3300	15 x 3	HBZ332□BB□□□K	11 x 3	HBE332MBB□□□K	9 x 3	HBX332SBB□□□K																			
4700	17 x 3	HBZ472□BB□□□K	13 x 3	HBE472MBB□□□K	11 x 3	HBX472SBB□□□K																			
6800					15 x 3	HBE682MBB□□□K	11 x 3	HBX682SBB□□□K																	
0.01μF					17 x 3	HBE103MBB□□□K	15 x 3	HBX103SBB□□□K																	
0.015μF									17 x 3	HBX153SBB□□□K															
0.022μF									20 x 3	HBX223SBB□□□K															

* Standard lead configuration, other lead spacing and diameter available on request

** $\pm 20\%$ available on request

	CERAMIC DIELECTRIC: K 2000 CERAMIC CODE: Z CAPACITANCE TOLERANCE: ± 10%, ± 20%				CERAMIC DIELECTRIC: K 6000 CERAMIC CODE: E CAPACITANCE TOLERANCE: ± 20%				CERAMIC DIELECTRIC: K 10000 CERAMIC CODE: X CAPACITANCE TOLERANCE: + 50 - 20%, (± 20 %)**														
RATED VOLTAGE = 3kV _{DC}					RATED VOLTAGE = 3kV _{DC}					RATED VOLTAGE = 3kV _{DC}													
CAP. VALUE (pF)	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE								
68	7 x 4	10	0.6	1.8	HCZ680□BC□□□K	7 x 4	10	0.6	2	HCE471MBC□□□K	7 x 4	10	0.6	1.8	HCX681SBC□□□K								
82	7 x 4				HCZ820□BC□□□K																		
100	7 x 4				HCZ101□BC□□□K																		
120	7 x 4				HCZ121□BC□□□K																		
150	7 x 4				HCZ151□BC□□□K																		
180	8 x 4				HCZ181□BC□□□K																		
220	8 x 4				HCZ221□BC□□□K																		
330	8 x 4				HCZ331□BC□□□K																		
470	10 x 4				HCZ471□BC□□□K																		
680	10 x 4				HCZ681□BC□□□K	8 x 4					HCE681MBC□□□K												
1000	11 x 4	10	0.8	2	HCZ102□BC□□□K	9 x 4	10	0.8	2.2	HCE102MBC□□□K	7 x 4	10	0.8	2	HCX102SBC□□□K								
1200	15 x 4				HCZ122□BC□□□K																		
1500	15 x 4				HCZ152□BC□□□K	11 x 4				HCE152MBC□□□K	8 x 4				HCX152SBC□□□K								
2200	17 x 4				HCZ222□BC□□□K	11 x 4				HCE222MBC□□□K	9 x 4				HCX222SBC□□□K								
3300	21 x 4				HCZ332□BC□□□K	15 x 4				HCE332MBC□□□K	10 x 4				HCX332SBC□□□K								
4700	21 x 4				HCZ472□BC□□□K	17 x 4				HCE472MBC□□□K	11 x 4				HCX472SBC□□□K								
6800	25 x 4				HCZ682□BC□□□K	21 x 4				HCE682SBC□□□K	15 x 4				HCX682SBC□□□K								
0.01μF					25 x 4										HCE103MBC□□□K	17 x 4		0.8	2	HCX103SBC□□□K			
0.015μF																21 x 4					HCX153SBC□□□K		

CERAMIC DIELECTRIC: K 6000 CERAMIC CODE: E CAPACITANCE TOLERANCE: ± 20%, (± 10%)**						CERAMIC DIELECTRIC: K 6000 CERAMIC CODE: E CAPACITANCE TOLERANCE: ± 20%					
RATED VOLTAGE = 4kV _{DC}						RATED VOLTAGE = 5kV _{DC}					
CAP. VALUE (pF)	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE	
33	8 x 4.5	12.5	0.6	1.9	HDE330MBD□□□K	7 x 5.0	12.5	0.6	3.8	HEE221MBE□□□K	
47	8 x 5.0				HDE470MBD□□□K						
68	8 x 5.0				HDE680MBD□□□K						
100	8 x 5.0			2.3	HDE101MBD□□□K						
150	8 x 5.0				HDE151MBD□□□K						
220	8 x 5.0				HDE221MBD□□□K						
330	8 x 5.0				HDE331MBD□□□K	9 x 5.0				HEE331MBE□□□K	
470	8 x 5.0			2.5	HDE471MBD□□□K						
680	9 x 5.0				HDE681MBD□□□K	9 x 5.0				HEE681MBE□□□K	
1000	10 x 5.0				HDE102MBD□□□K	11 x 5.0				HEE102MBE□□□K	
1500	12 x 5.0	HDE152MBD□□□K	13 x 5.5		HEE152MBE□□□K						
2200	13 x 5.0	0.8	2.7	HDE222MBD□□□K	15 x 5.5				HEE222MBE□□□K		
3300	15 x 5.0			HDE332MBD□□□K							
4700	18 x 5.0			HDE472MBD□□□K							

*Standard lead configuration, other lead spacing and diameter available on request

**Narrow tolerance available on request



CAP. VALUE (pF)	CERAMIC DIELECTRIC: K 2000 CERAMIC CODE: Z CAPACITANCE TOLERANCE: ± 20%, (± 10%)					CERAMIC DIELECTRIC: K 6000 CERAMIC CODE: E CAPACITANCE TOLERANCE: ± 20%					CERAMIC DIELECTRIC : K 2000 CERAMIC CODE : X CAPACITANCE TOLERANCE: ± 20% (± 10%)																																
	RATED VOLTAGE = 6kV _{DC}					RATED VOLTAGE = 6kV _{DC}					RATED VOLTAGE = 8kV _{DC}																																
	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE	D x s (MAX) (mm)	F ± 1* (mm)	d ± 0.05* (mm)	V ± 0.5* (mm)	ORDERING CODE																												
56	7 x 5	12.5	0.6	3.5	HFZ560□BF□□□K	7x5	12.5	0.6	3.5	HFE151MBF□□□K	9x8.3	12.5	0.8	4	HGZ101MBP□□□K																												
68	7 x 5				HFZ680□BF□□□K											HFE221MBF□□□K	11x8.3	HGZ121MBP□□□K																									
82	7 x 5				HFZ820□BF□□□K														HFE 331MBF□□□K	13x8.3	HGZ151MBP□□□K																						
100	8 x 5				HFZ101□BF□□□K																	14x8.3	HGZ181MBP□□□K																				
120	8 x 5				HFZ121□BF□□□K																			16x8.3	HGZ221MBP□□□K																		
150	8 x 5				HFZ151□BF□□□K																					HFE681MBF□□□K	18x8.3	HGZ271MBP□□□K															
180	10 x 5				HFZ181□BF□□□K																								HFE471MBF□□□K	21x8.3	HGZ331MBP□□□K												
220	10 x 5				HFZ221□BF□□□K																											HFE102MBF□□□K	24x8.3	HGZ391MBP□□□K									
270	10 x 5				HFZ271□BF□□□K																														HFE152MBF□□□K	24x8.3	HGZ471MBP□□□K						
330	10 x 5				HFZ331□BF□□□K																																	HFE222MBF□□□K	HFE332MBF□□□K	HGZ561MBP□□□K			
390	12 x 5				HFZ391□BF□□□K																																				HFE472MBF□□□K	HFE682MBF□□□K	HGZ681MBP□□□K
470	12 x 5				HFZ471□BF□□□K																																						
560	13 x 5	HFZ561□BF□□□K	HFE682MBF□□□K	HFE682MBF□□□K	HGZ821MBP□□□K																																						
680	15 x 5	HFZ681□BF□□□K				HFE682MBF□□□K	HFE682MBF□□□K	HGZ102MBP□□□K																																			
820	15 x 5	HFZ821□BF□□□K							HFE682MBF□□□K	HFE682MBF□□□K	HGZ122MBP□□□K																																
1000	17 x 5	HFZ102□BF□□□K										HFE682MBF□□□K	HFE682MBF□□□K	HGZ152MBP□□□K																													
1200	19 x 5	HFZ122□BF□□□K													HFE682MBF□□□K	HFE682MBF□□□K	HGZ182MBP□□□K																										
1500	21 x 5	HFZ152□BF□□□K																HFE682MBF□□□K	HFE682MBF□□□K	HGZ222MBP□□□K																							
1800	21 x 5	HFZ182□BF□□□K																			HFE682MBF□□□K	HFE682MBF□□□K	HGZ222MBP□□□K																				
2200	25 x 5	HFZ222□BF□□□K																						HFE682MBF□□□K	HFE682MBF□□□K	HGZ222MBP□□□K																	
2700	25 x 5	HFZ272□BF□□□K																									HFE682MBF□□□K	HFE682MBF□□□K	HGZ222MBP□□□K														
3300																														HFE682MBF□□□K	HFE682MBF□□□K	HGZ222MBP□□□K											
4700																																	HFE682MBF□□□K	HFE682MBF□□□K	HGZ222MBP□□□K								
6800																																				HFE682MBF□□□K	HFE682MBF□□□K	HGZ222MBP□□□K					

CAP. VALUE (pF)	CERAMIC DIELECTRIC: K 2000 CERAMIC CODE: Z CAPACITANCE TOLERANCE: ± 20%, (± 10%)					CERAMIC DIELECTRIC: K 2000 CERAMIC CODE: Z CAPACITANCE TOLERANCE: ± 20%, (± 10%)				
	RATED VOLTAGE = 10kV _{DC}					RATED VOLTAGE = 15kV _{DC}				
	D x s (MAX) (mm)	F ±1* (mm)	d ±0.05* (mm)	V ±0.5* (mm)	ORDERING CODE	D x s (MAX) (mm)	F ±1* (mm)	d ±0.05* (mm)	V ±0.5* (mm)	ORDERING CODE
100	11 x 6	12.5	0.8	5	HHZ101MBH□□□K	18 x 8	12.5	0.8	7	HIZ101MBJ□□□K
120	11 x 6				HHZ121MBH□□□K	18 x 8				HIZ121MBJ□□□K
150	11 x 9				HHZ151MBH□□□K	12 x 11				HIZ151MBJ□□□K
180	11 x 9				HHZ181MBH□□□K	13 x 11				HIZ181MBJ□□□K
220	11 x 9				HHZ221MBH□□□K	13 x 11				HIZ221MBJ□□□K
270	13 x 9				HHZ271MBH□□□K	14 x 11				HIZ271MBJ□□□K
330	13 x 9				HHZ331MBH□□□K	15 x 11				HIZ331MBJ□□□K
390	14 x 9				HHZ391MBH□□□K	16 x 11				HIZ391MBJ□□□K
470	16 x 9				HHZ471MBH□□□K	18 x 11				HIZ471MBJ□□□K
560	16 x 9				HHZ561MBH□□□K	21 x 11				HIZ561MBJ□□□K
680	18 x 9				HHZ681MBH□□□K	21 x 11				HIZ681MBJ□□□K
820	18 x 9				HHZ821MBH□□□K	21 x 11				HIZ821MBJ□□□K
1000	21 x 9			HHZ102MBH□□□K						
1200	21 x 5			HHZ122MBH□□□K						

*Standard lead configuration, other lead spacing and diameter available on request

ORDERING CODE

Ordering code	□ 7th digit	Capacitance tolerance	$\pm 10\%$ = K $\pm 20\%$ = M
	□□□ 10th / 11th / 12th digit	Lead configuration (See General Info.)	+ 50 - 20% = S