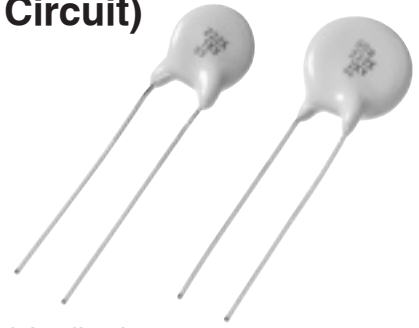


High Voltage Ceramic Disc Capacitors (For DC Circuit)

Series: **KB Char. B/Y5P, 1 to 3 kVDC**

Series: **MEH Char. E/Y5U, 1 to 3 kVDC**



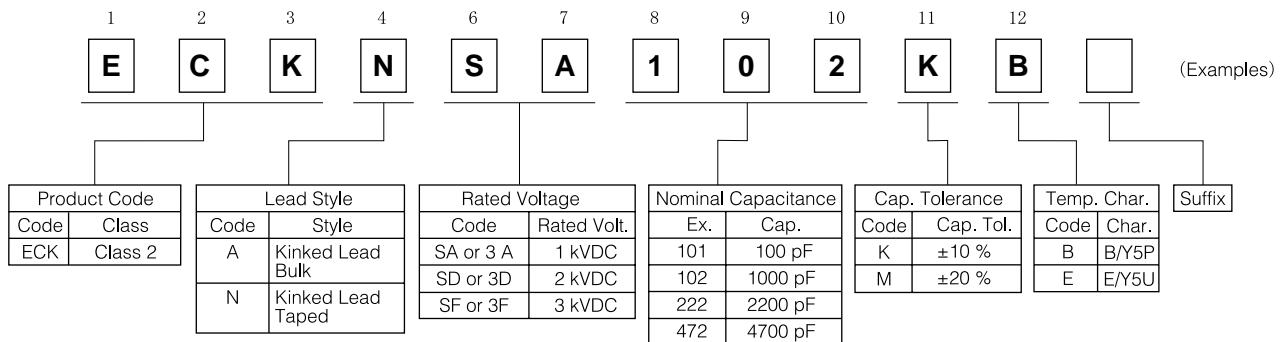
■ Features

- Miniaturized for applications in high DC voltage circuitry
- Flame-retardant insulation coating
- Easy mounting using Kinked Leads and Radial Taping

■ Recommended Applications

- DC or Low frequency High Voltage circuits. (Please use the KBP or KRP series for High frequency or pulse circuitry such as in Snubber circuitry of switching power supplies or in Horizontal resonance circuitry of TV and CRT displays)

■ Explanation of Part Numbers



■ Specifications

Characteristics	Specifications												
Operating Temperature Range	-25 to 105 °C												
Rated Voltage	1 kVDC to 3 kVDC												
Dielectric Withstanding Voltage	200 % of Rated Voltage for 1 to 5 seconds												
Capacitance	Within specified tolerance, when measured at 1 kHz ± 20 %, 1 to 5 Vrms, and 20 °C												
Dissipation Factor (tan δ)	tan δ ≤ 0.025 at 1 kHz ± 20 %, 1 to 5 Vrms, and 20 °C												
Insulation Resistance	10000 M Ω min. at 500 VDC 1 minute electrification												
Temperature Characteristics	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Series</th> <th>Char.</th> <th>max. Cap. Change</th> <th>Temp. Range</th> </tr> </thead> <tbody> <tr> <td>KB</td> <td>B</td> <td>±10 %</td> <td>-25 to 85 °C</td> </tr> <tr> <td>MEH</td> <td>E</td> <td>+20, -55 %</td> <td>-25 to 85 °C</td> </tr> </tbody> </table>	Series	Char.	max. Cap. Change	Temp. Range	KB	B	±10 %	-25 to 85 °C	MEH	E	+20, -55 %	-25 to 85 °C
	Series	Char.	max. Cap. Change	Temp. Range									
	KB	B	±10 %	-25 to 85 °C									
MEH	E	+20, -55 %	-25 to 85 °C										

■ Handling Precautions

See Pages 80 to 81

■ Packaging Information

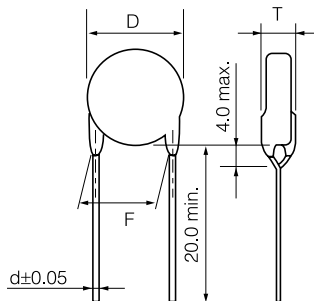
See Pages 82 to 83

■ Dimensions in mm (not to scale)

Standard lead styles are Kinked Lead and Kinked Lead Taping as below.

Non-standard lead-forming style such as Straight Lead, Straight Lead Taping and Crimped Lead Taping are available on special order.

● Kinked Lead Type

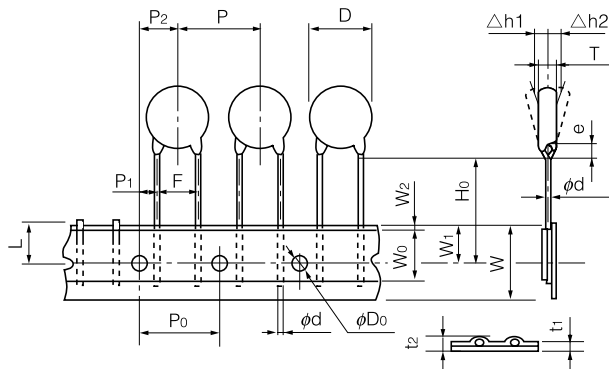


Note: Tolerance of Lead Space

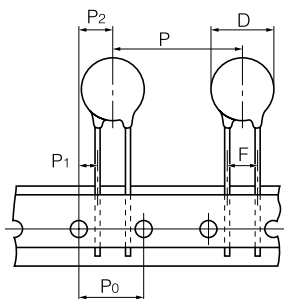
Dim. F (Nominal)	Tolerance of Dim. F
5.0	±1.0
7.5	±1.5
10.0	±1.5

● Kinked Lead Taping type

Type N0, N1



Type N2 *



* Same dimensions as Type N0, N1 except for special dimensions.

Taping Type	N0	N1	N2
Symbol			
P	12.7±1.0	15.0±2.0	30.0±2.0
P ₀	12.7±0.3	15.0±0.3	
F	5.0±0.8	7.5±1.0	
P ₁	3.85±0.70	3.75±0.80	
P ₂	6.35±1.30	7.5±1.5	
D	To comply with each individual specification		
W	18.0 ^{+1.0} _{-0.5}		
W ₀	10.0 min.		
W ₁	9.0±0.5		
W ₂	3.0 max.		
H ₀	18.0 ^{-2.0} ₀		
e	4.0 max.		
φD ₀	4.0±0.2		
φd	0.60±0.05	0.65±0.05	
t ₁	0.6±0.3		
t ₂	1.5 max.		
T	To comply with each individual specification		
Δh ₁ , Δh ₂	2.0 max.		
L	11.0 max.		

■ Rating and Characteristics

● Series KB (Class 2, Temp. Char. B/Y5P, 1 to 3 kVDC)

Rated Volt.	Cap. in pF	Cap. Tol. (%)	Dimensions in mm		Kinked Lead Type (Bulk)			Kinked Lead Taping Type			
			D max.	T max.	Part Number	Dimensions in mm		Part Number	Taped Type	Dimensions in mm	
						F	d			F	d
1 kVDC	100	±10	6.0	5.5	ECKASA101KB	5.0	0.60	ECKNSA101KB	N0	5.0	0.60
	150	±10	6.0	5.5	ECKASA151KB	5.0	0.60	ECKNSA151KB	N0	5.0	0.60
	220	±10	6.0	5.5	ECKASA221KB	5.0	0.60	ECKNSA221KB	N0	5.0	0.60
	330	±10	6.0	5.5	ECKASA331KB	5.0	0.60	ECKNSA331KB	N0	5.0	0.60
	470	±10	6.0	5.5	ECKASA471KB	5.0	0.60	ECKNSA471KB	N0	5.0	0.60
	680	±10	6.0	5.5	ECKASA681KB	5.0	0.60	ECKNSA681KB	N0	5.0	0.60
	1000	±10	6.5	5.5	ECKASA102KB	5.0	0.60	ECKNSA102KB	N0	5.0	0.60
	1500	±10	7.5	5.5	ECKASA152KB	5.0	0.60	ECKNSA152KB	N0	5.0	0.60
	2200	±10	9.0	5.5	ECKASA222KB	5.0	0.60	ECKNSA222KB	N0	5.0	0.60
	3300	±10	10.0	5.5	ECKASA332KB	5.0	0.60	ECKNSA332KB	N0	5.0	0.60
2 kVDC	4700	±10	12.0	5.5	ECKASA472KB	5.0	0.60	ECKNSA472KB	N0	5.0	0.60
	100	±10	6.0	5.5	ECKASD101KB	5.0	0.60	ECKNSD101KB	N0	5.0	0.60
	150	±10	6.0	5.5	ECKASD151KB	5.0	0.60	ECKNSD151KB	N0	5.0	0.60
	220	±10	6.0	5.5	ECKASD221KB	5.0	0.60	ECKNSD221KB	N0	5.0	0.60
	330	±10	6.0	5.5	ECKASD331KB	5.0	0.60	ECKNSD331KB	N0	5.0	0.60
	470	±10	6.0	5.5	ECKASD471KB	5.0	0.60	ECKNSD471KB	N0	5.0	0.60
	680	±10	6.5	5.5	ECKASD681KB	5.0	0.60	ECKNSD681KB	N0	5.0	0.60
	1000	±10	7.5	5.5	ECKASD102KB	5.0	0.60	ECKNSD102KB	N0	5.0	0.60
	1500	±10	9.0	5.5	ECKASD152KB	5.0	0.60	ECKNSD152KB	N0	5.0	0.60
	2200	±10	10.5	5.5	ECKASD222KB	5.0	0.60	ECKNSD222KB	N0	5.0	0.60
3 kVDC	3300	±10	12.0	5.5	ECKASD332KB	5.0	0.60	ECKNSD332KB	N0	5.0	0.60
	4700	±10	14.5	5.5	ECKASD472KB	10.0	0.65	ECKNSD472KB	N2	7.5	0.65
	100	±10	6.0	5.5	ECKASF101KB	7.5	0.65	ECKNSF101KB	N1	7.5	0.65
	150	±10	6.0	5.5	ECKASF151KB	7.5	0.65	ECKNSF151KB	N1	7.5	0.65
	220	±10	6.0	5.5	ECKASF221KB	7.5	0.65	ECKNSF221KB	N1	7.5	0.65
	330	±10	6.0	5.5	ECKASF331KB	7.5	0.65	ECKNSF331KB	N1	7.5	0.65
	470	±10	7.0	5.5	ECKASF471KB	7.5	0.65	ECKNSF471KB	N1	7.5	0.65
	680	±10	8.0	5.5	ECKASF681KB	7.5	0.65	ECKNSF681KB	N1	7.5	0.65
	1000	±10	9.0	5.5	ECKASF102KB	7.5	0.65	ECKNSF102KB	N1	7.5	0.65
	1500	±10	11.0	5.5	ECKASF152KB	7.5	0.65	ECKNSF152KB	N1	7.5	0.65
2200	±10	13.0	5.5	ECKASF222KB	7.5	0.65	ECKNSF222KB	N1	7.5	0.65	

Note: Lead spacing (Dim. F) of 5.0 mm is available for rated voltage 3 kVDC capacitors that are 11.0 mm or less in the body diameter (Dim. D) on special order.

Rating and Characteristics

Series MEH (Class 2, Temp. Char. E/Y5U, 1 to 3 kVDC)

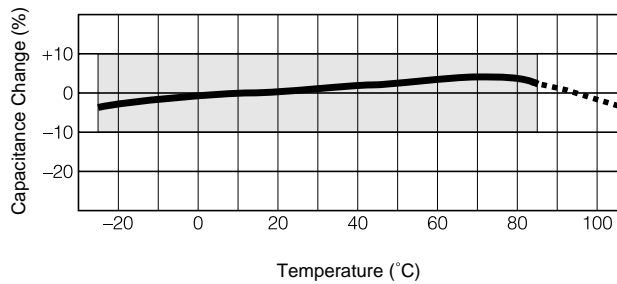
Rated Volt.	Cap. in pF	Cap. Tol. (%)	Dimensions in mm		Kinked Lead Type (Bulk)			Kinked Lead Taping Type			
			D max.	T max.	Part Number	Dimensions in mm		Part Number	Taped Type	Dimensions in mm	
						F	d			F	d
1 kVDC	680	±20	7.0	5.0	ECKA3A681MEH	5.0	0.60	ECKN3A681MEH	N0	5.0	0.60
	1000	±20	7.0	5.0	ECKA3A102MEH	5.0	0.60	ECKN3A102MEH	N0	5.0	0.60
	1500	±20	7.0	5.0	ECKA3A152MEH	5.0	0.60	ECKN3A152MEH	N0	5.0	0.60
	2200	±20	8.0	5.0	ECKA3A222MEH	5.0	0.60	ECKN3A222MEH	N0	5.0	0.60
	3300	±20	9.0	5.0	ECKA3A332MEH	5.0	0.60	ECKN3A332MEH	N0	5.0	0.60
	4700	±20	10.5	5.0	ECKA3A472MEH	5.0	0.60	ECKN3A472MEH	N0	5.0	0.60
	6800	±20	12.5	5.0	ECKA3A682MEH	5.0	0.60	ECKN3A682MEH	N1	7.5	0.65
2 kVDC	10000	±20	15.0	5.0	ECKA3A103MEH	10.0	0.65	ECKN3A103MEH	N2	7.5	0.65
	1000	±20	8.0	6.0	ECKA3D102MEH	7.5	0.65	ECKN3D102MEH	N1	7.5	0.65
	1500	±20	9.5	6.0	ECKA3D152MEH	7.5	0.65	ECKN3D152MEH	N1	7.5	0.65
	2200	±20	10.0	6.0	ECKA3D222MEH	7.5	0.65	ECKN3D222MEH	N1	7.5	0.65
	3300	±20	12.5	6.0	ECKA3D332MEH	7.5	0.65	ECKN3D332MEH	N1	7.5	0.65
	4700	±20	14.5	6.0	ECKA3D472MEH	10.0	0.65	ECKN3D472MEH	N2	7.5	0.65
3 kVDC	6800	±20	15.5	6.0	ECKA3D682MEH	10.0	0.65	ECKN3D682MEH	N2	7.5	0.65
	1000	±20	9.0	7.0	ECKA3F102MEH	7.5	0.65	ECKN3F102MEH	N1	7.5	0.65
	1500	±20	11.0	7.0	ECKA3F152MEH	7.5	0.65	ECKN3F152MEH	N1	7.5	0.65
	2200	±20	12.0	7.0	ECKA3F222MEH	7.5	0.65	ECKN3F222MEH	N1	7.5	0.65
	3300	±20	14.5	7.0	ECKA3F332MEH	10.0	0.65	ECKN3F332MEH	N2	7.5	0.65
4700	±20	16.5	7.0	ECKA3F472MEH	10.0	0.65	ECKN3F472MEH	N2	7.5	0.65	

Note: Lead spacing (Dim. F) of 5.0 mm is available for rated voltage 2 kVDC and 3 kVDC capacitors that are 11.0 mm or less in the body diameter (Dim. D) on special order.

Typical Temperature Characteristics

Series KB (Char. B/Y5P)

(Temp. Range : -25 to 85°
max.Cap.Change : ±10%)



Series MEH (Char. E/Y5U)

(Temp. Range : -25 to 85°
max.Cap.Change : +20, -55%)

