

# Safety Recognized/High Voltage Ceramic Capacitors



## Type KX Small Size (Reinforced Insulation) -IEC60384-14 Class X1, Y1-

### ■ Features

1. We design capacitors in much more compact size than current Type KX, having reduced the diameter by 20% max.
2. Operating temperature range guaranteed up to 125 degrees (UL: 85 deg.).
3. Dielectric strength: AC4000V
4. Class X1/Y1 capacitors which are recognized by UL/CSA/BSI/SEMKO/SEV/VDE/FIMKO/NEMKO/DEMKO/IMQ.
5. Possible to use with a component in appliance requiring reinforced insulation and double insulation based on UL1492, IEC60065 and IEC60950.
6. Coated with flame-retardant epoxy resin (conforming to UL94V-0 standard).
7. Cost-saving automatic insertion available.
8. Available product for RoHS Restriction (EU Directive 2002/95/EC).

### ■ Applications

1. Ideal for use as X/Y capacitors for AC line filter and primary-secondary coupling on switching power supplies and AC adapters.
2. Ideal for use on D-A isolation and noise absorption for DAA modems without transformers.

\* : Small sized Type KX differs from current Type KX in electrical characteristics, such as the voltage dependency, of capacitance temperature dependency, and Dielectric strength.

Therefore, before replacing current Type KX, please make a performance check by equipment. Please refer below too.

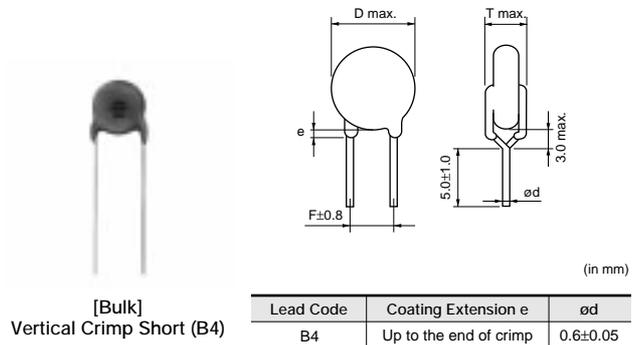
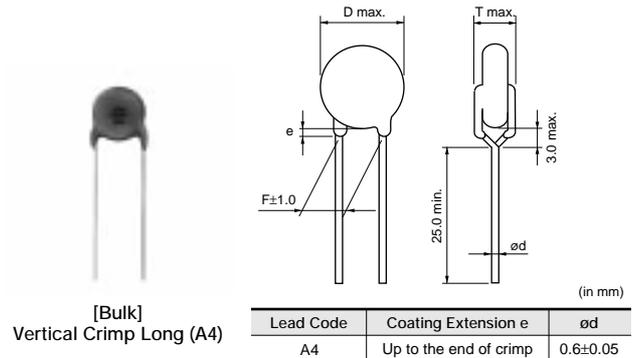
[Notice (Rating)

item 2. "Performance check by equipment".]

### ■ Standard Recognition

	Standard No.	Recognized No.	Rated Voltage
UL	UL1414	E37921	AC250V (r.m.s.)
CSA	E384-14	LR44559	
BSI	EN60065 (8.8, 14.2) EN132400	227859	
SEMKO	EN132400	310283	
SEV		02.1105	
VDE		40002831	
FIMKO		18987	
NEMKO		P02102026	
DEMKO		139471-01/A1	
IMQ		V4069	

- The recognition number might change by the revision of the application standard and the change within the range of acquisition.
- Please contact us when the recognition of CQC (Chinese Safety Standard) or KTL (South Korean Safety Standard) is necessary.



### ■ Marking

Example	Item
	① Type Designation KX
	② Nominal Capacitance (Marked with 3 figures)
	③ Capacitance Tolerance
	④ Company Name Code
	⑤ Manufactured Date Code
	Class Code X1Y1
	Rated Voltage Mark 250~

Part Number	AC Rated Voltage (Vac)	Temp. Char.	Capacitance (pF)	Body Dia. D (mm)	Lead Spacing F (mm)	Body Thickness T (mm)	Lead Package Long Bulk	Lead Package Short Bulk	Lead Package Taping (1)
DE1B3KX101K□□□L01	250	B	100 ±10%	8 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1B3KX151K□□□L01	250	B	150 ±10%	8 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1B3KX221K□□□L01	250	B	220 ±10%	8 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1B3KX331K□□□L01	250	B	330 ±10%	8 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1B3KX471K□□□L01	250	B	470 ±10%	8 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1B3KX681K□□□L01	250	B	680 ±10%	9 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1E3KX102M□□□L01	250	E	1000 ±20%	7 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1E3KX152M□□□L01	250	E	1500 ±20%	8 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1E3KX222M□□□L01	250	E	2200 ±20%	9 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1E3KX332M□□□L01	250	E	3300 ±20%	10 max.	10.0	7.0 max.	A4B	B4B	N4A
DE1E3KX472M□□□L01	250	E	4700 ±20%	12 max.	10.0	7.0 max.	A4B	B4B	N4A

Three blank columns are filled with the lead and packaging codes. Please refer to the 3 columns on the right for the appropriate code.  
 Murata part numbers might be changed depending on lead code or any other changes. Therefore, please specify only the type name (KX) and capacitance of products in the parts list when it is required for applying safety standard of electric equipment.