

Mid-high Voltage Ceramic Capacitors

Disk type with lead

Safety standard approved

CD series

Issue date: June 2009

- All specifications are subject to change without notice.
 - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
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Mid-high Voltage Ceramic Capacitors(Disk with Lead) Safety Standard Approved CD Series

Conformity to RoHS Directive

REINFORCED INSULATION TYPE Temperature range: **-25 to +105°C**
CLASS 2 HIGH DIELECTRIC

FEATURES

- Smaller than conventional capacitors.
- Flame-resistant reinforced outer insulation prevents fires, electrical shock, and other potential hazards.
- Compliant with the safety standards of 11 countries.
- This ceramic capacitor meets European Class II (reinforced insulation) Safety Standards VDE, SEV, SEMKO, BS. Since it is rated at a withstand voltage of AC.4000V, it can be used in single-unit configurations within European Class II devices.

PRODUCT IDENTIFICATION

CD 12 -E 2GA 222 M Y N S
(1) (2) (3) (4) (5) (6) (7) (8) (9)

- (1) Type
- (2) Shape
- (3) Capacitance temperature characteristics
- (4) Rated voltage
- (5) Nominal capacitance
- (6) Capacitance tolerance
- (7) Class
- (8) Lead type
- (9) Safety standard

MARKINGS

Item	Marking examples	
1. Series	CD	<p>(Marking position of the monogram is reference.)</p>
2. Nominal capacitance	222(2200pF)	
3. Capacitance tolerance	M(±20%)	
4. Rated voltage Eac	250V ~ (AC.250V)	
5. Withstand voltage Eac	T4KV ~ (AC.4kV)	
6. Sub-class of safety performance	X1Y1	
7. TDK's logogram		
8. Date code	94 (2009.4)*	
9. Regulatory body safety standards compliance markings		

* Year and month of production: last digit of year + month denoted by 1, 2, 3, 4, 5, 6, 7, 8, 9, O (October), N (November), or D (December).

INTERNATIONALLY CERTIFIED STATUS

IEC60384-14 EN60384-14 Approved

Safety standard	Standard No. of IEC	Standard No.	Temperature characteristics	Insulation sub-class	Rated voltage Eac(V)	Approval report No.		
						Japan	Taiwan	Xiamen
BSI	IEC 60065	BS EN 60065	B, E	X1, Y1	250	226495	226495	226495
	IEC 60384-14	BS EN60384-14						
VDE	IEC 60384-14	EN60384-14	B, E	X1	400	138526	138550	124321
				Y1				
SEV	IEC 60384-14	EN60384-14	B, E	X1	400	08.0891	08.0891	08.0891
				Y1				
SEMKO	IEC 60384-14	EN60384-14	B, E	X1, Y1	250	0139185/01-02	0139185/01-02	9945094
NEMKO	IEC 60384-14	EN60384-14	B, E	X1, Y1	250	P01101987	P01101987	P99102682
DEMKO	IEC 60384-14	EN60384-14	B, E	X1, Y1	250	310959-01	310959-01	99-04087
FIMKO	IEC 60384-14	EN60384-14	B, E	X1, Y1	250	FI 17415	FI 17415	FI 24307
IMQ	IEC 60384-14	EN60384-14	B, E	X1, Y1	250	V3691	V3691	V3691
SAA	IEC 60065	AS3250	B, E	—	400	6268	6268	6268
UL	—	UL 1414	B, E	(X, Y)	250	E37861	E37861	E37861
CSA	—	CSA C22.2 No.0 & No.1	B, E	(X, Y)	250	LR35801	LR65972	LR65972

• Certificate numbers shall be changed owing to the revisions of the related standards.

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CAPACITANCE AND DIMENSIONS

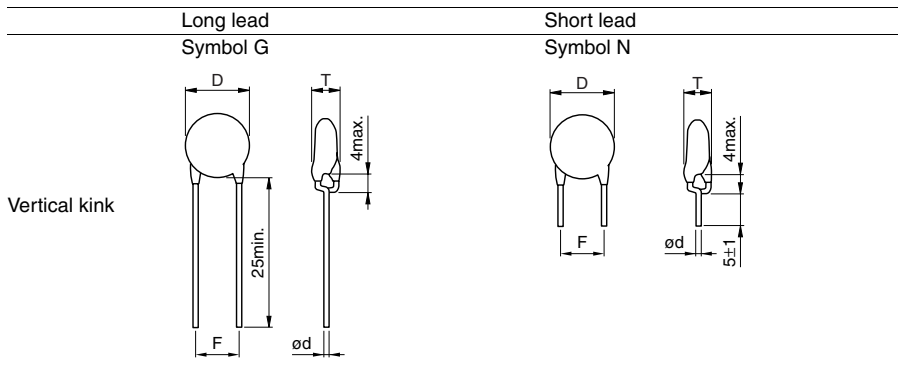
Part No	Capacitance temperature characteristics	Capacitance (pF)	Capacitance tolerance	Dimensions (mm)		
				D max.	F	ød
CD70-B2GA101KY□S	B(±10%)	100	K(±10%)	7	10+2, -1	0.6±0.05
CD70-B2GA151KY□S		150	K(±10%)	7	10+2, -1	0.6±0.05
CD85-B2GA221KY□S		220	K(±10%)	8.5	10+2, -1	0.6±0.05
CD90-B2GA331KY□S		330	K(±10%)	9	10+2, -1	0.6±0.05
CD90-B2GA391KY□S		390	K(±10%)	9	10+2, -1	0.6±0.05
CD95-B2GA471KY□S		470	K(±10%)	9.5	10+2, -1	0.6±0.05
CD75-E2GA681MY□S	E(+20, -55%)	680	M(±20%)	7.5	10+2, -1	0.6±0.05
CD85-E2GA102MY□S		1,000	M(±20%)	8.5	10+2, -1	0.6±0.05
CD10-E2GA152MY□S		1,500	M(±20%)	10	10+2, -1	0.6±0.05
CD12-E2GA222MY□S		2,200	M(±20%)	11.5	10+2, -1	0.6±0.05
CD14-E2GA332MY□S		3,300	M(±20%)	13.5	10+2, -1	0.6±0.05
CD15-E2GA392MY□S		3,900	M(±20%)	14.5	10+2, -1	0.6±0.05
CD16-E2GA472MY□S		4,700	M(±20%)	15.5	10+2, -1	0.6±0.05

* □ : Lead shape symbol

SHAPES AND DIMENSIONS

VERTICAL KINK LEAD TYPE

Dimensions in mm



- We recommend using a vertical kink type.
- For bulk products, we recommend a short lead type with the symbol N.

• For more information about products with other capacitance or other data, please contact us.

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