

Mid-high Voltage Ceramic Capacitors(Disk with Lead) Safety Standard Approved CS Series

Conformity to RoHS Directive

BASIC 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 (conforms to European standards in accordance with IEC Pub. 384-14 Version 2).

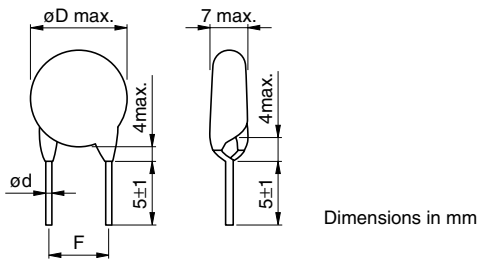
MARKINGS

Item		Marking examples	
1. Series	CS	Front	Back
2. Nominal capacitance	222(2200pF)		
3. Capacitance tolerance	M(±20%)		
4. Rated voltage Eac	250V ~ (AC.250V)		
5. Sub-class of safety performance	X1Y2		
6. TDK's logogram	⬡ or ⬢		
7. Date code	68 (2006.8)*		
8. Regulatory body safety standards compliance markings			
BSI (U.K.)	BS415	SEV (Switzerland)	TJ508
SEMKO (Sweden)		UL (U.S.A.)	
VDE (Germany)		CSA (Canada)	
		FIMKO (Finland)	
		DEMKO (Denmark)	
		NEMKO (Norway)	
		IMQ (Italy)	

(Marking position of the monogram is reference.)

* 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).

SHAPES AND DIMENSIONS



• 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.

• All specifications are subject to change without notice.

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INTERNATIONALLY CERTIFIED STATUS
IEC60384-14 2nd. ed. EN132400 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 IEC 60384-14 2nd. ed.	BS EN 60065:1998 (BS415:1998) BS EN132400:1995 (EN132400:1994)	B, E, F	X1, Y2	250	226494	226494	226494
VDE	IEC 60384-14 2nd. ed.	EN132400	B, E, F	X1, Y2	250	138559	138560	122006
SEV	IEC 60384-14 2nd. ed.	EN132400	B, E, F	X1, Y2	250	01.15.05	01.15.05	99.7 70564
SEMKO	IEC 60384-14 2nd. ed.	EN132400	B, E, F	X1, Y2	250	0139186/01-02	0139186/01-02	9945094
NEMKO	IEC 60384-14 2nd. ed.	EN132400	B, E, F	X1, Y2	250	P01101988	P01101988	P99102682
DEMKO	IEC 60384-14 2nd. ed.	EN132400	B, E, F	X1, Y2	250	310966-01	310966-01	99-04087
FIMKO	IEC 60384-14 2nd. ed.	EN132400	B, E, F	X1, Y2	250	FI 17416	FI 17416	14237
IMQ	IEC 60384-14 2nd. ed.	EN132400	B, E, F	X1, Y2	250	V3692	V3692	V3692
SAA	IEC 60065	AS3250	B, E, F	—	400	6268	6268	6268
UL	—	UL 1414	B, E, F	(X, Y)	250	E37861	E37861	E37861
CSA	—	CSA C22.2 No.0 & No.1	B, E, F	(X, Y)	250	LR35801	LR65972	201723

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

CAPACITANCE AND DIMENSIONS

Part No.	Capacitance temperature characteristics	Capacitance (pF)	Capacitance tolerance	Dimensions (mm)		
				øD max.	F	ød
CS70-B2GA101KYNS	B(±10%)	100	K(±10%)	7	7.5±1.5	0.6±0.05
CS70-B2GA151KYNS		150	K(±10%)	7	7.5±1.5	0.6±0.05
CS70-B2GA221KYNS		220	K(±10%)	7	7.5±1.5	0.6±0.05
CS85-B2GA331KYNS		330	K(±10%)	8.5	7.5±1.5	0.6±0.05
CS85-B2GA471KYNS		470	K(±10%)	8.5	7.5±1.5	0.6±0.05
CS95-B2GA681KYNS		680	K(±10%)	9.5	7.5±1.5	0.6±0.05
CS10-B2GA102KYNS		1,000	K(±10%)	10	7.5±1.5	0.6±0.05
CS80-E2GA102MYNS	E(+20, -55%)	1,000	M(±20%)	8	7.5±1.5	0.6±0.05
CS90-E2GA152MYNS		1,500	M(±20%)	9	7.5±1.5	0.6±0.05
CS11-E2GA222MYNS		2,200	M(±20%)	10.5	7.5±1.5	0.6±0.05
CS13-E2GA332MYNS		3,300	M(±20%)	12.5	7.5±1.5	0.6±0.05
CS14-E2GA392MYNS		3,900	M(±20%)	13.5	7.5±1.5	0.6±0.05
CS15-E2GA472MYNS		4,700	M(±20%)	14.5	7.5±1.5	0.6±0.05
CS12-F2GA472MYNS	F(+30, -80%)	4,700	M(±20%)	12	7.5±1.5	0.6±0.05
CS17-F2GA103MYNS		1,0000	M(±20%)	16.5	10±2	0.6±0.05

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

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