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DONG IL ELECTRONICS CO., LTD



DONG IL ELECTRONICS



동일은 미래를 준비합니다.
부가가치창출을 위한 혁신!
고객의 기쁨을 위한 가치창조!
작지만 소중함을 아는 기업!

동일이 있습니다 !



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CEO MESSAGE

DONG IL Electronics has been growing based on trust and confidence of the customers, since we were established in 1979. We have produced disc ceramic capacitors in priority, and aimed to be the world-best specialized electronic components manufacturer.

In the meantime, we have devoted our ability to achieve customer's satisfaction from not only top-quality products, but also challenging R&D investment in production facilities, and training ourselves in pursuit of being the best. At present, We are well recognized as one of the active and competitive manufacturers that have close business relationship with many world-leading Korean major electronic enterprises.

In the era of rapid and diverse advance in technology trend, we promise to our all customers that we will focus our interests and ability continuously to improve process performance more, and hence to match up to customer demand.

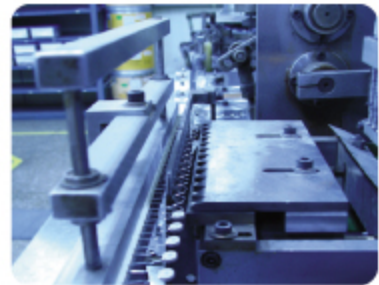
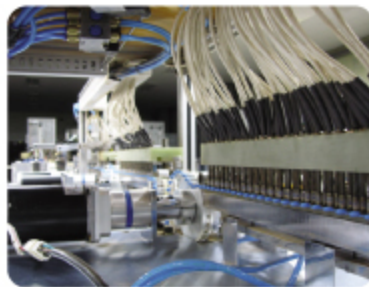
All members of DONG IL Electronics do their best under the slogan *"Top Quality & Heart Satisfaction to Customers !"* We wish your persistent growth in the business with us, and finally hope to hear your concern and encouragement as always.

CEO *Shin, Dongchan*



COMPANY INTRODUCTION

Corporate Name	DONG IL ELECTRONICS CO., LTD.	회 사 명	동일전자 (주)
CEO	SHIN, DONG CHAN	대표이사	신 동 찬
Address	6, Gaheunggongdan-gil, Gageum-myeon, Chungju, Chungbuk, Korea 380-921	주 소	충북 충주시 가금면 가흥공단길 6
TEL	+82-43-855-7800	전화번호	+82-43-855-7800
Homepage	www.dongilcap.com	홈페이지	www.dongilcap.com
Establishment	July 20, 1979	회사설립일	1979년 7월 20일
Employee	120	종업원수	120
Main Products	Ceramic Capacitors	주생산물	세라믹 콘덴서



COMPANY HISTORY

[회사 연혁]

- 1979. 07. 동일전자 주식회사 설립
- 1990. 05. 품질관리 등급업체 지정(사정번호 B사 2갑 578)
- 1991. 06. UL 안전규격 인증
- 1991.09. 공장 증설이전 (충주시 가금면 가흥리 24번지)
- 1993. 04. VDE, CSA(6월) 안전규격인증 취득
- 1995. 04. 수출 유망 중소기업선정 (중소기업진흥공단)
- 1995. 11. ATC (Antenna Terminal Capacitor) 생산
- 1996. 09 C.R Multiple 생산
- 1998. 02. DEMKO, SEMKO, NEMKO, FIMKO, SEV, 안전규격인증 취득,
- 1998. 06. KS A/ISO 9002 인증
- 2002. 08. KS A/ISO 9001 업그레이드 인증, EK/KTL 안전규격인증
- 2004. 08. KS A/ISO 14001:2001/ISO14001:1996
- 2007. 07. ENEC/FI 통합 안전규격 인증
- 2009. 07. ISO9001:2008/ ISO14001: 2004 인증 갱신
- 2010. 01. CQC 안전규격인증 취득
- 2011. 06. KS Q ISO 9001 / KS I ISO 14001 인증갱신



DI DONG IL ELECTRONICS

[COMPANY HISTORY]

- 1979. 07. "DONG IL Industry" Established
- 1990. 05. Appinted Quality-management rated company (Company Class No. B 2-578)
- 1991. 06. UL Certification acquired
- 1991. 09. Factory Relocation (24, Gaheung-ri, Gageum-myeon, Chungju-city)
- 1993. 04. VDE, CSA (June) Certification acquired
- 1995. 04. Technical Advance Company Appointment.
- 1995. 11. ATC(Antenna Terminal Capacitor) Production
- 1996. 09. C.R Multiple Production
- 1998. 02. DEMKO, SEMKO, NEMKO, FIMKO, SEV, VDE, Certification acquired (IEC384-14 2nd)
- 1998. 06. KS A/ISO9002 Certification acquired
- 2002. 08. KS A/ISO9001 Certification Conversion, EK Certification acquired
- 2004. 08. KS A/ISO14001:2001 / ISO14001:1996 Certification acquired
- 2007. 07. ENEC/FIMKO Certification acquired, ISO 14001:2004 updated
- 2009. 07. ISO9001:2008 / ISO14001:2004 updated
- 2010. 01. CQC Certification acquired
- 2011. 06. KS Q ISO 9001 / KS I ISO 14001 updated

DONG IL CAPACITORS TYPE DESIGNATION

DONG IL ceramic capacitors are simple in construction and can be applied to tuning, coupling, and by-passing from HF to UHF range.

1	2	3	4	5	6	7	8	9	10
DA	2G	YE	102	M	F	K	C	04	

1	CLASS AND TYPE	CC : Temperature Compensation Type CG : Semi-conductor Type DA : AC Voltage Type (AC400V)	CK : High Dielectric Type DS : AC Voltage Type (AC250V)																																																																		
2	RATED VOLTAGE	<table border="1"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>J</th> <th>K</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>1V</td> <td>1.25V</td> <td>1.6V</td> <td>2V</td> <td>2.5V</td> <td>3.15V</td> <td>4V</td> <td>5V</td> <td>6.3V</td> <td>8V</td> </tr> <tr> <td>1</td> <td>10V</td> <td>12.5V</td> <td>16V</td> <td>20V</td> <td>25V</td> <td>31.5V</td> <td>40V</td> <td>50V</td> <td>63V</td> <td>80V</td> </tr> <tr> <td>2</td> <td>100V</td> <td>125V</td> <td>160V</td> <td>200V</td> <td>200V</td> <td>315V</td> <td>400V</td> <td>500V</td> <td>630V</td> <td>800V</td> </tr> <tr> <td>3</td> <td>1KV</td> <td>1.25KV</td> <td>1.6KV</td> <td>2KV</td> <td>2KV</td> <td>3.15KV</td> <td>4KV</td> <td>5KV</td> <td>6.3KV</td> <td>8.0KV</td> </tr> <tr> <td>4</td> <td>10KV</td> <td>12.5KV</td> <td>16KV</td> <td>20KV</td> <td>20KV</td> <td>31.5KV</td> <td>40KV</td> <td>50KV</td> <td>63KV</td> <td>80KV</td> </tr> </tbody> </table>			A	B	C	D	E	F	G	H	J	K	0	1V	1.25V	1.6V	2V	2.5V	3.15V	4V	5V	6.3V	8V	1	10V	12.5V	16V	20V	25V	31.5V	40V	50V	63V	80V	2	100V	125V	160V	200V	200V	315V	400V	500V	630V	800V	3	1KV	1.25KV	1.6KV	2KV	2KV	3.15KV	4KV	5KV	6.3KV	8.0KV	4	10KV	12.5KV	16KV	20KV	20KV	31.5KV	40KV	50KV	63KV	80KV
	A	B	C	D	E	F	G	H	J	K																																																											
0	1V	1.25V	1.6V	2V	2.5V	3.15V	4V	5V	6.3V	8V																																																											
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2	100V	125V	160V	200V	200V	315V	400V	500V	630V	800V																																																											
3	1KV	1.25KV	1.6KV	2KV	2KV	3.15KV	4KV	5KV	6.3KV	8.0KV																																																											
4	10KV	12.5KV	16KV	20KV	20KV	31.5KV	40KV	50KV	63KV	80KV																																																											
3	TEMPERATURE CHARACTERISTICS (-25°C ~ +85°C)	CC (CLASS I) CH : 0±60PPM/°C - BLACK SL : -1000 - +350PPM/°C - OMITTED CK (CLASS II) B : Y5P(+10 ~ -10%) E : Y5U(+20 ~ -55%) F : Y5V(+30 ~ -80%) CG (CLASS III) F : Y5V(+30 ~ -80%)	R : Y5R(+15 ~ -15%)																																																																		
4	CAPACITANCE	The first two digits are significant figures of capacitance and third one denotes number of following zeros. OR5 : 0.5pF 150 : 15pF 101 : 100pF 102 : 1,000pF 103 : 10,000pF 104 : 100,000pF																																																																			
5	CAPACITANCE TOLERANCE	C : ±0.25pF D : ±0.5pF J : ±5% K : ±10% M : ±20% P : +100% ~ -0% Z : +80% ~ -20%																																																																			
6	PACKING STYLE	F : Taping B : Bulk																																																																			
7	LEAD VARIATION	S : Straight Type K : Kink Type (Vertical Crimp Type)																																																																			
8	LEAD STYLE	C : Cutting type (in case of bulk product)																																																																			
9	LEAD LENGTH	04 (3.2±0.5 mm), 07 (6.7±0.5 mm), 10 (10±0.5 mm)																																																																			
10	Etc.	H : Halogen Free, C : CP LEAD-WIRE																																																																			

SAFETY STANDARD RECOGNIZED CERAMIC CAPACITORS DA SERIES (CLASS X1, Y1)

FEATURES

1. Operating temperature range guaranteed up to 125 degrees (UL: 85 deg.).
2. Dielectric strength : DA AC4,000V
(In case of Lead spacing F=5mm AC2,000V max)
3. Class X1,Y1 capacitors which are certified by UL, CSA, ENEC/FI, EK, CQC
4. Possible to use with a component in appliance requiring reinforced insulation
5. Coated with flame-retarant epoxy resin (conforming to UL94V-0 standard).
6. Taping available for automatic insertion

SPECIFICATION

- Temp. Range : -25°C ~ +125°C (+85°C)

- Capacitance (pF) : Measured at $1 \pm 0.1\text{KHz}$:
1 Vrms and $20 \pm 2^\circ\text{C}$

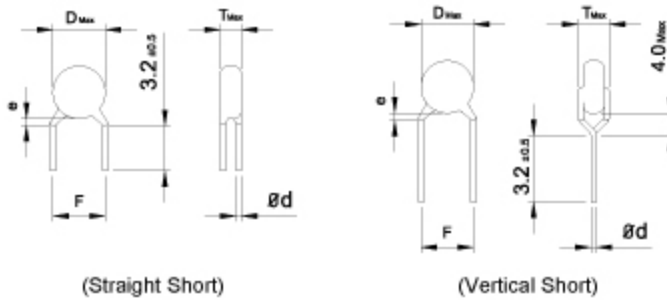
- Dissipation Factor : $\tan\delta$ (%)

T.C	B(Y5P)	E(Y5U)	F(Y5V)
$\tan\delta$ (%)	2.5% max	2.5% max	5.0% max

- Insulation Resistance

10,000 M Ω min at $500 \pm 50\text{V DC}$ for 1 minute

LIST OF STANDARD LEAD SHAPES



- Coating extension on Lead (e)

Rated Voltage	e (mm)
DA (400V AC)	3.0 max

Approval standard and recognized No.

TYPE	Rated voltage	Testing voltage	Standard	Certified No.	Temp. Char.
DA X1,Y1	400V AC	AC 4,000V	UL	E128646	SL,B,E,F
			CSA	1583421	SL,B,E,F
			EK	SJ03001-2001A	SL,B,E,F
			ENEC	FI2009035	SL,B,E,F
			CQC	CQC10001040615	SL,B,E,F

T.C (Temperature Compensation Capacitor)

TYPE	Rated voltage	Part Number	Dimensions (mm)				Capacitance (pF)		Marking
			Dmax	Tmax	F	ød	SL		
DA X1,Y1	400V AC	DA2G△△□□□△	7.0	4.5	10.0	0.60	3~8		
		DA2G△△□□□△	8.0				10~39		
		DA2G△△□□□△	9.0				47		
		DA2G△△□□□△	10.0	56~68					
		DA2G△△□□□△	11.0	82					

Hi-K (High Dielectric Capacitor)

TYPE	Rated voltage	Part Number	Dimensions (mm)				Capacitance (pF)		Marking
			Dmax	Tmax	F	ød	B(Y5P)	E(Y5U)	
DA X1,Y1	400V AC	DA2G△△□□□△	8.0	6.0	10.0	0.60	100~470	1000	
		DA2G△△□□□△	10.0				560~680	1500	
		DA2G△△□□□△	12.0				820~1000	2200	
		DA2G△△□□□△	14.0				-	3300	
		DA2G△△□□□△	16.0				-	4700	

SAFETY STANDARD RECOGNIZED CERAMIC CAPACITORS DS SERIES (CLASS X1, Y2)

FEATURES

1. Operating temperature range guaranteed up to 125 degrees (UL: 85 deg.).
2. Dielectric strength : DS AC2,600V
(In case of Lead spacing F=5mm AC2,000V max)
3. Class X1, Y2 capacitors which are certified by UL, CSA, ENEC/FI, EK, CQC
4. Coated with flame-retarant epoxy resin (conforming to UL94V-0 standard).
5. Taping available for automatic insertion

SPECIFICATION

- Temp. Range : -25°C ~ +125°C (+85°C)

- Capacitance (pF) : Measured at $1 \pm 0.1\text{KHz}$
1 Vrms and $20 \pm 2^\circ\text{C}$

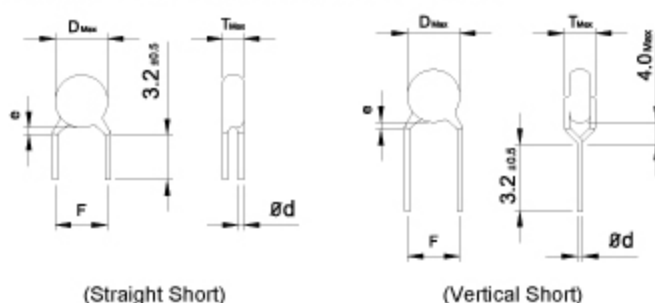
- Dissipation Factor : $\tan\delta$ (%)

T.C	B(Y5P)	E(Y5U)	F(Y5V)
$\tan\delta$ (%)	2.5% max	2.5% max	5.0% max

- Insulation Resistance

10,000 M Ω min at $500 \pm 50\text{V DC}$ for 1 minute

LIST OF STANDARD LEAD SHAPES



- Coating extension on Lead (e)

Rated Voltage	e (mm)
DS (250V AC)	3.0 max

Approval standard and recognized No.

TYPE	Rated voltage	Testing voltage	Standard	Certified No.	Temp. Char.
DS X1,Y2	250V AC	AC 2,600V	UL	E128646	SL.B.E.F
			CSA	1583421	SL.B.E.F
			EK	SJ03001-2002A	SL.B.E.F
			ENEC	FI2009035	SL.B.E.F
			CQC	CQC10001040614	SL.B.E.F

T.C (Temperature Compensation Capacitor)

TYPE	Rated voltage	Part Number	Dimensions (mm)				Capacitance (pF)			Marking
			Dmax	Tmax	F	ød	SL			
DS X1,Y2	250V AC	DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	7.0	4.5	7.5	0.60	3~8			
		DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	8.0				10~39			
		DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	9.0				47			
		DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	10.0	56~68						
		DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	11.0	82						

Hi-K (High Dielectric Capacitor)

TYPE	Rated voltage	Part Number	Dimensions (mm)				Capacitance (pF)			Marking
			Dmax	Tmax	F	ød	B(Y5P)	E(Y5U)	F(Y5V)	
DS X1,Y2	250V AC	DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	8.0	6.0	7.5	0.60	100~470	1000	-	
		DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	10.0				560~680	1500	-	
		DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	12.0				820~1000	2200	4700	
		DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	14.0				-	3300	-	
		DS2E $\Delta\Delta\Box\Box\Box\Box\Delta$	16.0				-	4700	10000	

MID-HIGH VOLTAGE CERAMIC CAPACITORS (DISC WITH LEAD) CLASS I : TEMPERATURE COMPENSATION AT HIGH FREQUENCY, CC SERIES

FEATURES

- Operating temperature range guaranteed up to 125 degrees.
- Coated with flame-retarant epoxy resin (conforming to UL94V-0 standard).
- Low dissipation factor, and decreased self-heating temperature in the high frequency, and high voltage application
- Taping available for automatic insertion
- Conforming the RoHS Directive with ceramic disc, Pb free lead wire, and internal solder material.

TEMPERATURE CHARACTERISTICS and CAPACITANCE TOLERANCE

Temperature range	Temperature characteristics	Capacitance tolerance
-25 to +85°C	SL +350 to -1000ppm/°C	J(±5%), K(±10%) D(±0.5pF) C(±0.25pF)

SPECIFICATION

- Operating Temp. Range : -25°C ~ +125°C
- Capacitance (pF) : Measured at 1 ± 0.1MHz
1 Vrms and 20 ± 2°C
- Quality Factor : Q

Capacitance	Q value
Less than 30pF	≥ 400+(20 x C*)
30pF and over	≥ 1000

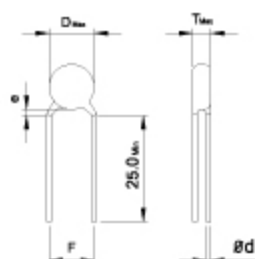
C* : Capacitance (pF)

- Insulation Resistance : 10,000 MΩ min, at rated voltage for 1 minute

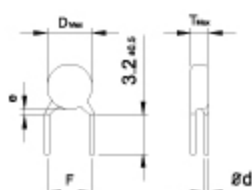
- Coating extension on Lead (e)

Rated Voltage	e (mm)
50V, 500V DC	2.0 max
above 1kV	3.0 max

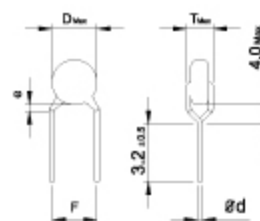
LIST OF STANDARD LEAD SHAPES



(Straight Long)



(Straight Short)



(Vertical Short)

CAPACITANCE ACCORDING TO TYPE

TYPE	Rated voltage	Part Number	Dimensions (mm)				Capacitance (pF)		Marking
			Dmax	Tmax	F	ød	SL		
CC	1KV	CC3A ΔΔ□□□Δ	6.0	4.0	5.0	0.50	10 ~ 68		
		CC3D ΔΔ□□□Δ	7.0		5.0	0.50	47 ~ 56		
	2KV	CC3D ΔΔ□□□Δ	8.0	4.0	5.0	0.50	68		
		CC3D ΔΔ□□□Δ			7.5	0.55	68		
	3KV	CC3F ΔΔ□□□Δ	6.0	4.0	5.0 ~ 7.5	0.55 (BK)	3 ~ 8		
		CC3F ΔΔ□□□Δ	7.0				10 ~ 33		
		CC3F ΔΔ□□□Δ	8.0				47 ~ 68		
		CC3F ΔΔ□□□Δ	9.0				100		
		CC3F ΔΔ□□□Δ	14.0				6.0		0.50 (T/P)
	6KV	CC3J ΔΔ□□□Δ	7.0	4.5	7.5 ~ 10.0	0.6	3 ~ 8		
		CC3J ΔΔ□□□Δ	8.0				10 ~ 39		
		CC3J ΔΔ□□□Δ	9.0				47 ~ 56		
		CC3J ΔΔ□□□Δ	10.0				6.0		68

MID-HIGH VOLTAGE CERAMIC CAPACITORS (DISC WITH LEAD) CLASS II : HIGH DIELECTRIC & GENERAL USE, CK SERIES

FEATURES

- Operating temperature range -25 to +85°C
- Coated with flame-retarant epoxy resin (conforming to UL94V-0 standard).
- Taping available for automatic insertion
- Conforming the RoHS Directive with ceramic disc, Pb free lead wire, and internal solder material.

TEMPERATURE CHARACTERISTICS and CAPACITANCE TOLERANCE

Temperature range	Temperature characteristics	Capacitance tolerance
-25 to +85°C	B(±10%)	K(±10%)
-25 to +85°C	E(+20, -55%)	M(±20%), Z(+80, -20%)
-25 to +85°C	F(+30, -80%)	Z(+80, -20%)

SPECIFICATION

- Operating Temp. Range : -25°C ~ +85°C
- Capacitance (pF) : Measured at 1 ± 0.1KHz: 1 Vrms and 20 ± 2°C

- Dissipation Factor : tanδ (%)

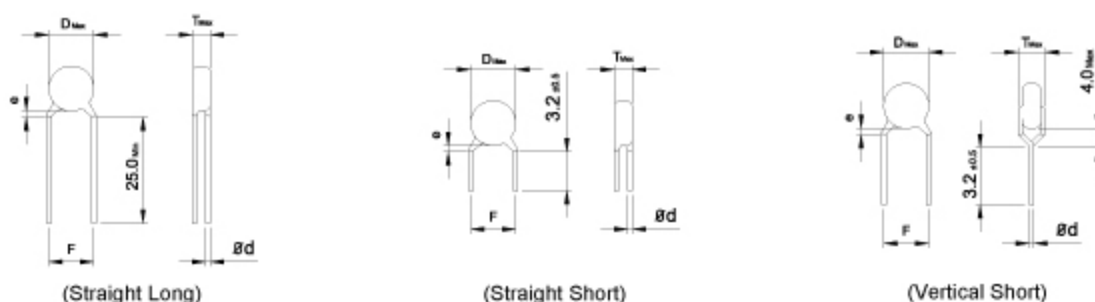
T.C	B(Y5P)	E(Y5U)	F(Y5V)
tanδ (%)	2.5% max	2.5% max	5.0% max

- Insulation Resistance : 10,000 MΩ min, at rated voltage for 1 minute

- Coating extension on Lead (e)

Rated Voltage	e (mm)
50V, 500V DC	2.0 max
above 1kV	3.0 max

LIST OF STANDARD LEAD SHAPES



CAPACITANCE ACCORDING TO TYPE

TYPE	Rated voltage	Part Number	Dimensions (mm)				Capacitance (pF)			Marking
			Dmax	Tmax	F	ød	B(Y5P)	E(Y5U)	F(Y5V)	
CK	1KV	CK3A ΔΔ□□□Δ	6.0	4.5	5.0	0.50	100~680	1000	-	
		CK3A ΔΔ□□□Δ	7.0				820~1000	2200	-	
		CK3A ΔΔ□□□Δ	9.0				1500~2200	4700	10000	
		CK3A ΔΔ□□□Δ	13.0				2700~3300	-	-	
		CK3A ΔΔ□□□Δ	16.0				4700	10000	-	
		CK3A ΔΔ□□□Δ	22.0				10000	-	-	
	2KV	CK3D ΔΔ□□□Δ	8.0	5.0	0.50	0.50	100~560	1000	-	
		CK3D ΔΔ□□□Δ	9.0				680~1000	2200	-	
		CK3D ΔΔ□□□Δ	10.0				1500	-	-	
		CK3D ΔΔ□□□Δ	11.0				2200	4700	-	
		CK3D ΔΔ□□□Δ	16.0				4700	10000	10000	
		CK3D ΔΔ□□□Δ	21.0				10000	-	-	
	3KV	CK3F ΔΔ□□□Δ	7.0	5.5	7.5	0.50	100~470	1000	-	
		CK3F ΔΔ□□□Δ	8.0				560~680	-	-	
		CK3F ΔΔ□□□Δ	9.0				820	2200	-	
		CK3F ΔΔ□□□Δ	10.0				1000	-	-	
		CK3F ΔΔ□□□Δ	12.0				1500	4700	-	
		CK3F ΔΔ□□□Δ	13.0				2200	-	-	
	6KV	CK3J ΔΔ□□□Δ	8.0	6.0	7.5	0.55	100~560	-	-	
		CK3J ΔΔ□□□Δ	9.0				680~820	-	-	
		CK3J ΔΔ□□□Δ	10.0				1000	-	-	

B
471K
6kV

MID-HIGH VOLTAGE CERAMIC CAPACITORS (DISC WITH LEAD) CLASS II : LOW DISSIPATION AT HIGH FREQUENCY, CK SERIES

FEATURES

- R-character ceramics are widely used as withstand voltage protection for power transistors and diodes of switching power sources, for controlling noise, and for absorbing high Frequency pulse such as Color TV horizontal output circuits. The high density and high operating frequency of switching power sources create high equipment temperature.
- Low dissipation factor & decreased self-heating temperature in the high frequency, and high voltage application.

TEMPERATURE CHARACTERISTICS and CAPACITANCE TOLERANCE

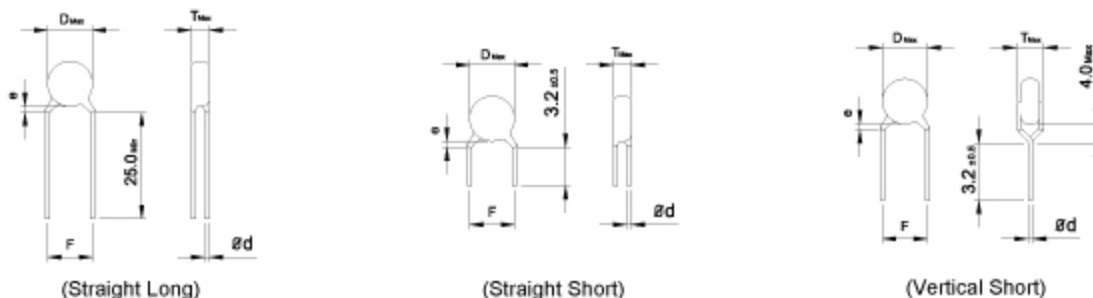
Temperature range	Temperature characteristics	Capacitance tolerance
-25 to +85°C	R(±15%)	K(±10%)
-25 to +125°C	R(+15, -30%)	

SPECIFICATION

- Operating Temp. Range : -25°C ~ +125°C
 - Capacitance (pF) : Measured at $1 \pm 0.1\text{KHz}$:
1 Vrms and $20 \pm 2^\circ\text{C}$
 - Dissipation Factor : $\tan\delta$ (%)
- | T.C | R(Y5R) |
|------------------|----------|
| $\tan\delta$ (%) | 0.2% max |
- Insulation Resistance : 10,000 MΩ min,
at $500\text{V} \pm 50\text{V DC}$ for 1 minute
 - Coating extension on Lead (e)

Rated Voltage	e (mm)
50V, 500V DC	2.0 max
above 1kV	3.0 max

LIST OF STANDARD LEAD SHAPES



CAPACITANCE ACCORDING TO TYPE

TYPE	Rated voltage	Part Number	Dimensions (mm)				Capacitance (pF)	Marking	
			Dmax	Tmax	F	ød			
CK	1KV	CK3A ΔΔ□□□Δ	6.0	4.5	5.0	0.50	100~470	R 221K 1kV	
		CK3A ΔΔ□□□Δ	7.0			~	560~680		
		CK3A ΔΔ□□□Δ	9.0			~	1000		
		CK3A ΔΔ□□□Δ	13.0			~	2200		
		CK3A ΔΔ□□□Δ	16.0			0.55	3300		
		CK3A ΔΔ□□□Δ	22.0			0.60	4700		
	2KV	CK3D ΔΔ□□□Δ	8.0	5.0	0.50	0.50	100~470		
		CK3D ΔΔ□□□Δ	9.0		~	560~680			
		CK3D ΔΔ□□□Δ	10.0		7.5	0.55	820~1000		
		CK3D ΔΔ□□□Δ	11.0		~	1500			
		CK3D ΔΔ□□□Δ	16.0		10.0	0.6	-		
	3KV	CK3F ΔΔ□□□Δ	7.0	5.5	5	0.50	100~180		
		CK3F ΔΔ□□□Δ	8.0		~		220~390		
		CK3F ΔΔ□□□Δ	9.0		~		470~560		
		CK3F ΔΔ□□□Δ	10.0		7.5		0.55		-
		CK3F ΔΔ□□□Δ	12.0		~		680		
		CK3F ΔΔ□□□Δ	13.0		10.0		~		820~1000
	CK3F ΔΔ□□□Δ	21.0	10.0	0.6	-				

RADIAL TYPE CERAMIC CAPACITORS (DISC WITH LEAD) CLASS III : SEMI-CONDUCTOR CAPACITOR, CG SERIES

FEATURES

- Larger capacitance in small sizes
- Stable capacitance change over the specified temperature
- These products shall conform the RoHS Directive due to Pb free of lead wire and internal solder material.

SPECIFICATION

- Operating Temp. Range : $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Capacitance (pF) : Measured at $1 \pm 0.1\text{KHz}$, 0.1 Vrms and $20 \pm 2^{\circ}\text{C}$

- Dissipation Factor : $\tan\delta$ (%)

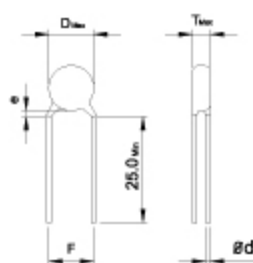
T.C	F(Y5V)
$\tan\delta$ (%)	5.0% max

- Insulation Resistance : $200\text{ M}\Omega$ Minimum, at rated voltage for 1 minute

TEMPERATURE CHARACTERISTICS and CAPACITANCE TOLERANCE

Temperature range	Temperature characteristics	Capacitance tolerance
-25 to $+85^{\circ}\text{C}$	F(+30, -80%)	Z(+80, -20%)

LIST OF STANDARD LEAD SHAPES



(Straight Long)

- Coating extension on Lead (e)

Rated Voltage	e (mm)
50V DC	2.5 max

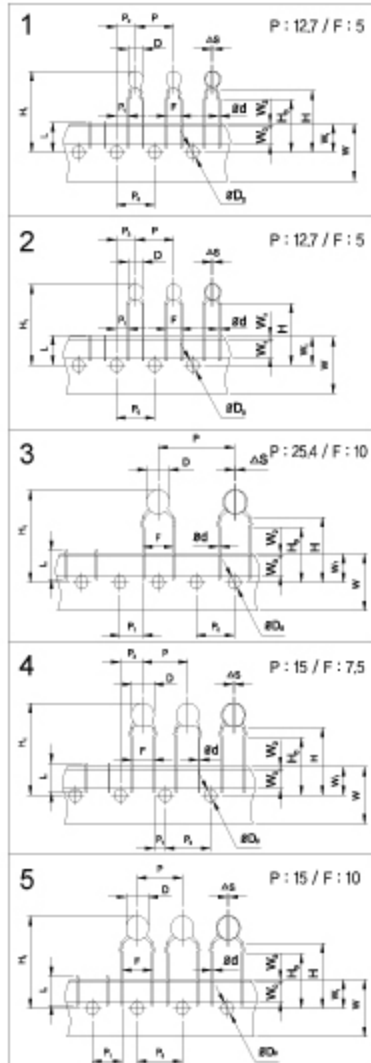
CAPACITANCE ACCORDING TO TYPE

TYPE	Rated voltage	Part Number	Dimensions (mm)				Capacitance (pF)	Marking
			Dmax	Tmax	F	ød	E(Y5U)	
CG	50V	CG1H△△□□□△	7.0	4.0	5.0	0.5	100,000	

TAPING DIMENSION & PACKAGING INFORMATION

TAPING DIMENSIONS

Item	Code	Dimensions(mm)				
		1(forming)	2(straight)	3	4	5
Body Diameter	D	4.0<D≤11.0	5.0<D≤19	13.0 Max	20.0 Max	
Body Thickness	T	4.0 Max	6.0 Max	5.0 Max	7.0 Max	
Lead Diameter	∅d	(0.5, 0.55, 0.6)±0.05				
Pitch of Sprocket Hole	P ₀	12.7±0.3	12.7±0.3	15.0±1.0		
Pitch of Component	P	12.7±1.0	25.4±2.0	15.0±1.0	15.0±1.0	
Lead length from Hole	P ₁	3.85±0.7	7.7±1.5	3.75±1.0	10.0±1.0	
Center to Lead						
Lead length from Hole	P ₂	6.35±1.3	-	7.5±1.5	-	
Center to component Center						
Lead Spacing	F	5.0 ^{+0.8} _{-0.2}	10.0±1.0	7.5±1.0	10.0±1.0	
Deviation across Tape	ΔS	0±1.0	0±2.0			
Deviation along Tape, Left, or Right	Δh	0±2.0				
Carrier tape width	W	18.0 ^{+0.8} _{-0.2}				
Hold down tape Width	W ₀	6.0 min	7.0 min			
Position of Sprocket hole	W ₁	9.0±0.5				
Hold Down Tape Position	W ₂	3.0 Max				
Height of Component From Hole Center	H	20.0±1.0				
Lead-Wire Clinch Height	H ₀	16.0±0.5				
Component Height	H ₁	32.25 Max				
Portion to Cut in case of Defect	L	11.0 Max				
Lead Protrusion	L _x	1.0 Max				
Diameter of Sprocket Hole	∅D ₀	4.0±0.2				
Total Tape Thickness	t ₁	0.7±0.2				
Total Thickness, Tape and Lead Wire	t ₂	1.5 Max				



※ Taping pattern in the Package is all "FLAT PACK".

PACKING INFORMATION

1. TAPING PACKAGING

Coated Material	Quantity	Ceramic capacitor Pitch Type
Phenol Resin	2,000	12.7 mm (DC 50/500V type)
	2,000	12.7 mm
Epoxy Powder	1,500	12.7 mm (Body Thickness : >3.2)
	1,000 / 1,500	15.0 mm
	500	25.4 mm & etc.

2. BULK PACKAGING

Voltage	Diameter /mm	Minimum Packing Quantity	
		Straight long	Cut
1kV ~ 6kV	6~8	1,000	1,000
	9~10	500	1,000
	11~15	500	500
	16~20	250	500
DA / DS	6~8	1,000	1,000
	9~11	500	1,000
	12~15	500	500

| GLOBAL |

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