Mid-high Voltage Ceramic Capacitors

Disk type with lead
Low dissipation at high frequency
General use

CC45 series

Issue date: July 2011

- 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.

TDK

Mid-high Voltage Ceramic Capacitors(Disk with Lead) Low Dissipation at High Frequency CC45 Series

Conformity to RoHS Directive

FEATURES

- High voltage ceramic capacitors series (for temperature compensation), low dissipation factor and higher reliability has been achieved through the use of TDK original dielectric and copper for electrode material due to nice matching of the ceramic dielectrics material for low dissipation factor, and copper for electrode.
- Low dissipation factor, and decreased self-heating temperature in the high frequency, and high voltage application.
- The rated voltage of 6kV series have been added the rated voltage of 3kV series.
- These products shall conform to RoHS Directive due to lead(Pb) free of lead wire and internal solder material.
- This product is compatible with halogen-free external resin coating (we recommend halogen-free products as standard).

OPERATING TEMPERATURE RANGE: –25 to +125°C

(The maximum operating temperature of 125°C includes capacitor self-generated heat of up to 20°C.)

PRODUCT IDENTIFICATION

CC	45	SL	3AD	101	J	Y	N	N	A
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

(1) Type
(2) Shape
(3) Capacitance temperature characteristics
(4) Rated voltage
(5) Nominal capacitance
(6) Capacitance tolerance
(7) Class
(8) Lead type
(9) General use
(10) Halogen-free compatible product

CAPACITANCE TEMPERATURE CHARACTERISTICS AND TOLERANCE

Temperature characteristics	Test temperature range	Capacitance tolerance
SL(+350 to –1000ppm/°C)	+20 to +85°C	C(±0.25pF)
		D(±0.5pF)
		J(±5%)

CAPACITANCE AND DIMENSIONS

TEMPERATURE CHARACTERISTICS: SL(+350 to –1000ppm/°C)

RATED VOLTAGE Edc: 1kV

Part No.		Capacitance	Dimensions(mm)				Taping
Halogen-free product	Current product	(pF)	D max.	T max.	F	d	dimensions
CC45SL3AD100JY□*NA	CC45SL3AD100JY□*N	10	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD120JY□NA	CC45SL3AD120JY□N	12	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD150JY□NA	CC45SL3AD150JY□N	15	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD180JY□NA	CC45SL3AD180JY□N	18	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD220JY□NA	CC45SL3AD220JY□N	22	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD270JY□NA	CC45SL3AD270JY□N	27	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD330JY□NA	CC45SL3AD330JY□N	33	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD390JY□NA	CC45SL3AD390JY□N	39	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD470JY□NA	CC45SL3AD470JY□N	47	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD560JY□NA	CC45SL3AD560JY□N	56	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD680JY□NA	CC45SL3AD680JY□N	68	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD820JY□NA	CC45SL3AD820JY□N	82	6.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD101JY□NA	CC45SL3AD101JY□N	100	6.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD121JY□NA	CC45SL3AD121JY□N	120	7.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD151JY□NA	CC45SL3AD151JY□N	150	7.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD181JY□NA	CC45SL3AD181JY□N	180	8.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD221JY□NA	CC45SL3AD221JY□N	220	8.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD271JY□NA	CC45SL3AD271JY□N	270	9.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD331JY□NA	CC45SL3AD331JY□N	330	10.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD391JY□NA	CC45SL3AD391JY□N	390	10.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3AD471JY□NA	CC45SL3AD471JY□N	470	11.5	5.0	7.5±1.5	0.6±0.05	V2
CC45SL3AD561JY□NA	CC45SL3AD561JY□N	560	12.5	5.0	7.5±1.5	0.6±0.05	V2
CC45SL3AD681JY□NA	CC45SL3AD681JY□N	680	13.5	5.0	7.5±1.5	0.6±0.05	V2
CC45SL3AD821JY□NA	CC45SL3AD821JY□N	820	14.5	5.0	7.5±1.5	0.6±0.05	—
CC45SL3AD102JY□NA	CC45SL3AD102JY□N	1,000	16.0	5.0	10.0±2	0.6±0.05	—

* □ : Lead shape symbol

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CAPACITANCE AND DIMENSIONS

TEMPERATURE CHARACTERISTICS: SL(+350 to −1000ppm/°C)

RATED VOLTAGE Edc: 2kV

Part No.		Capacitance	Dimensions(mm)				Taping
Halogen-free product	Current product	(pF)	D max.	T max.	F	d	dimensions
CC45SL3DD100JY□*NA	CC45SL3DD100JY□*N	10	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD120JY□NA	CC45SL3DD120JY□N	12	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD150JY□NA	CC45SL3DD150JY□N	15	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD180JY□NA	CC45SL3DD180JY□N	18	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD220JY□NA	CC45SL3DD220JY□N	22	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD270JY□NA	CC45SL3DD270JY□N	27	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD330JY□NA	CC45SL3DD330JY□N	33	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD390JY□NA	CC45SL3DD390JY□N	39	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD470JY□NA	CC45SL3DD470JY□N	47	5.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD560JY□NA	CC45SL3DD560JY□N	56	6.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD680JY□NA	CC45SL3DD680JY□N	68	6.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD820JY□NA	CC45SL3DD820JY□N	82	7.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD101JY□NA	CC45SL3DD101JY□N	100	7.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD121JY□NA	CC45SL3DD121JY□N	120	8.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD151JY□NA	CC45SL3DD151JY□N	150	8.5	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD181JY□NA	CC45SL3DD181JY□N	180	9.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD221JY□NA	CC45SL3DD221JY□N	220	10.0	5.0	5.0±1.5	0.6±0.05	V1
CC45SL3DD271JY□NA	CC45SL3DD271JY□N	270	11.0	5.0	7.5±1.5	0.6±0.05	V2
CC45SL3DD331JY□NA	CC45SL3DD331JY□N	330	11.5	5.0	7.5±1.5	0.6±0.05	V2
CC45SL3DD391JY□NA	CC45SL3DD391JY□N	390	12.5	5.0	7.5±1.5	0.6±0.05	V2
CC45SL3DD471JY□NA	CC45SL3DD471JY□N	470	13.5	5.0	7.5±1.5	0.6±0.05	V2
CC45SL3DD561JY□NA	CC45SL3DD561JY□N	560	14.5	5.0	7.5±1.5	0.6±0.05	V3
CC45SL3DD681JY□NA	CC45SL3DD681JY□N	680	16.0	5.0	10.0±2	0.6±0.05	—

* □ : Lead shape symbol

RATED VOLTAGE Edc: 3kV

Part No.		Capacitance	Dimensions(mm)				Taping
Halogen-free product	Current product	(pF)	D max.	T max.	F	d	dimensions
CC45SL3FD100JY□*NA	CC45SL3FD100JY□*N	10	5.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD120JY□NA	CC45SL3FD120JY□N	12	5.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD150JY□NA	CC45SL3FD150JY□N	15	5.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD180JY□NA	CC45SL3FD180JY□N	18	5.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD220JY□NA	CC45SL3FD220JY□N	22	5.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD270JY□NA	CC45SL3FD270JY□N	27	5.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD330JY□NA	CC45SL3FD330JY□N	33	6.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD390JY□NA	CC45SL3FD390JY□N	39	6.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD470JY□NA	CC45SL3FD470JY□N	47	6.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD560JY□NA	CC45SL3FD560JY□N	56	7.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD680JY□NA	CC45SL3FD680JY□N	68	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD820JY□NA	CC45SL3FD820JY□N	82	8.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD101JY□NA	CC45SL3FD101JY□N	100	8.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD121JY□NA	CC45SL3FD121JY□N	120	9.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD151JY□NA	CC45SL3FD151JY□N	150	10.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD181JY□NA	CC45SL3FD181JY□N	180	11.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD221JY□NA	CC45SL3FD221JY□N	220	12.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD271JY□NA	CC45SL3FD271JY□N	270	13.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3FD331JY□NA	CC45SL3FD331JY□N	330	14.0	6.0	7.5±1.5	0.6±0.05	V3
CC45SL3FD391JY□NA	CC45SL3FD391JY□N	390	15.0	6.0	7.5±1.5	0.6±0.05	—
CC45SL3FD471JY□NA	CC45SL3FD471JY□N	470	16.0	6.0	10.0±2	0.6±0.05	—

* □ : Lead shape symbol

CAPACITANCE AND DIMENSIONS

TEMPERATURE CHARACTERISTICS: SL(+350 to −1000ppm/°C)

RATED VOLTAGE Edc: 6kV

Part No.		Capacitance	Dimensions(mm)				Taping
Halogen-free product	Current product	(pF)	D max.	T max.	F	d	dimensions
CC45SL3JD030CY□*NA	CC45SL3JD030CY□*N	3	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD050DY□NA	CC45SL3JD050DY□N	5	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD080DY□NA	CC45SL3JD080DY□N	8	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD100JY□NA	CC45SL3JD100JY□N	10	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD120JY□NA	CC45SL3JD120JY□N	12	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD150JY□NA	CC45SL3JD150JY□N	15	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD180JY□NA	CC45SL3JD180JY□N	18	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD220JY□NA	CC45SL3JD220JY□N	22	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD270JY□NA	CC45SL3JD270JY□N	27	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD330JY□NA	CC45SL3JD330JY□N	33	7.5	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD390JY□NA	CC45SL3JD390JY□N	39	8.0	6.0	7.5±1.5	0.6±0.05	V2
CC45SL3JD470JY□NA	CC45SL3JD470JY□N	47	8.5	6.0	7.5±1.5	0.6±0.05	V2

* □ : Lead shape symbol

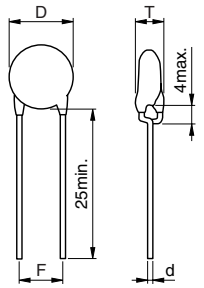
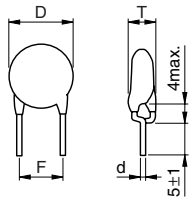
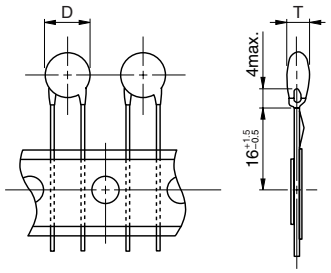
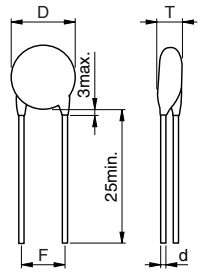
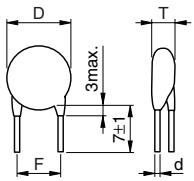
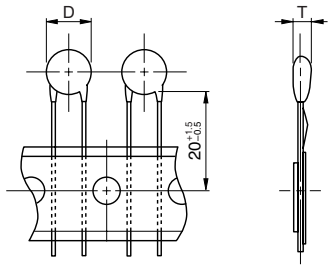
LIST OF STANDARD LEAD SHAPES

The lead type is indicated by the letter which is the 15th character of the product name.

Example) TDK Product Name: **CC45SL3AD101JYNNA**

└N: Lead type (Vertical kink, Short)

Dimensions in mm

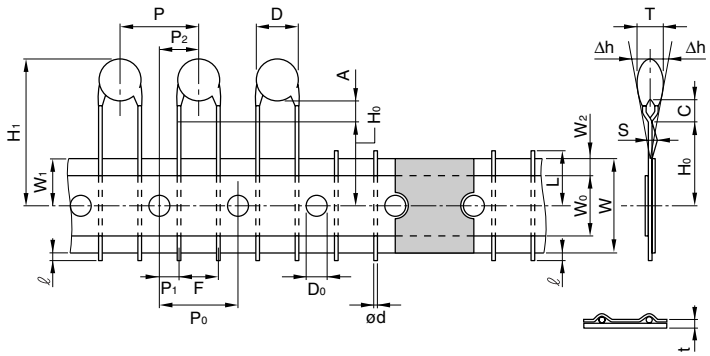
	Long lead	Short lead	Taping
	Symbol G	Symbol N	Symbol V
Vertical kink			
	Symbol A	Symbol H	Symbol P
Straight			

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

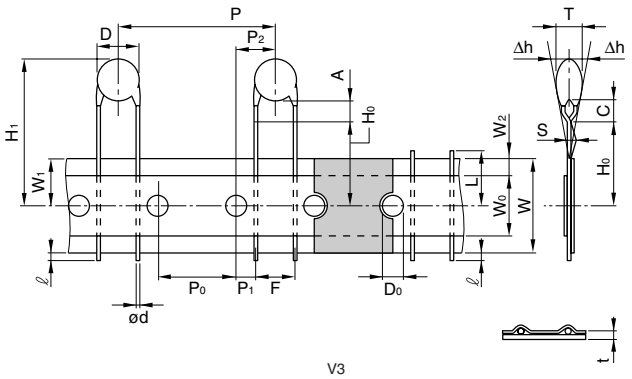
- For more information about products with other capacitance or other data, please contact us.

- All specifications are subject to change without notice.

TAPING DIMEMSIONS
VERTICAL KINK LEAD TYPE



V1, V2



V3

Item	Symbol	Dimensions(mm)			Remarks
		V1	V2	V3	
Body diameter	D	Depends on the specification of each product.			
Body thickness	T	Depends on the specification of each product.			
Lead-wire diameter	ød	0.6±0.05	0.6±0.05	0.6±0.05	
Pitch of component	P	12.7±1.0	15.0±1.0	30.0±1.0	Including the slant of body
Feed hole pitch	P_0	12.7±0.3	15.0±0.3	15.0±0.3	Excepting the tape splicing part
Feed hole center to lead	P_1	3.85±0.7	3.75±0.7	3.75±0.7	
Feed hole center to component center	P_2	6.35±1.3	7.5±1.3	7.5±1.3	
Lead-to lead distance	F	5+0.8, –0.2	7.5±0.8	7.5±0.8	Measuring point is bottom kink
Component alignment	Δh	0±2.0	0±2.0	0±2.0	Including the slanting body due to bending lead-wire
Tape width	W	18.0+1.0, –0.5	18.0+1.0, –0.5	18.0+1.0, –0.5	
Adhesive tape width	W_0	11.5min.	11.5min.	11.5min.	
Hole position	W_1	9.0±0.5	9.0±0.5	9.0±0.5	
Adhesive tape position	W_2	3.0max.	3.0max.	3.0max.	Adhesive tape do not stick out the tape
Bottom of kink from tape center	H_0	16.0+1.5, –0.5	16.0+1.5, –0.5	16.0+1.5, –0.5	
Height of body from tape center	H_1	46.0max.	46.0max.	46.0max.	
Lead-wire protrusion	ℓ	1.0max.	1.0max.	1.0max.	
Feed hole diameter	D_0	4.0±0.2	4.0±0.2	4.0±0.2	
Total tape thickness	t	0.6±0.3	0.6±0.3	0.6±0.3	Do not including adhesive tape
Length of snipped lead	L	11.0max.	11.0max.	11.0max.	
Coating on lead	C	4.0max.	4.0max.	4.0max.	
Height of kink	A	4.0max.	4.0max.	4.0max.	Measuring point is bottom kink
Spring action	S	2.0max.	2.0max.	2.0max.	

OCEAN CHIPS
Океан Электроники
Поставка электронных компонентов

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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