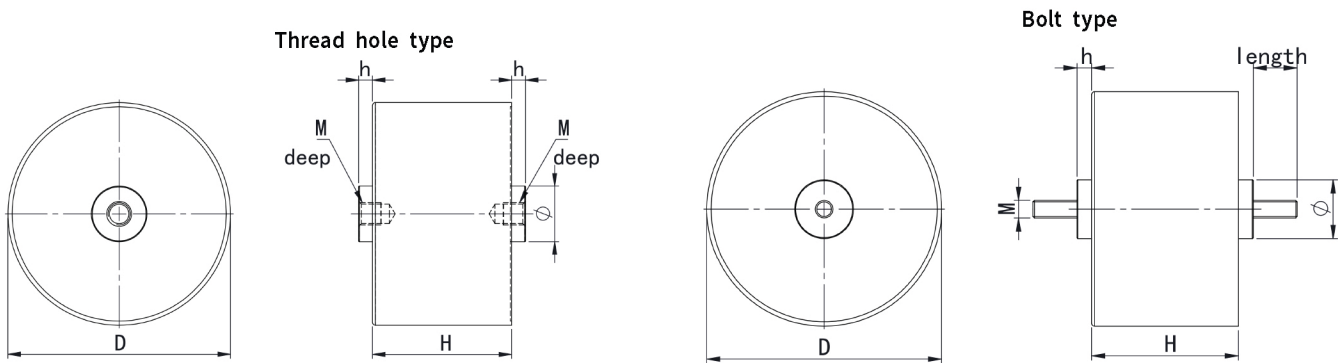


# C3K

Snubber capacitor for high voltage, high current pulses (Dry type, Axial type)



## ■ Outline Drawing



## ■ Features

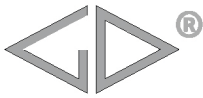
- Low loss and small inherent temperature rise
- Low ESR, Low Ls, can withstanding high r.m.s current
- Self-healing property
- Flame retardation plastic case, filled with resin

## ■ Applications

- Damping of voltage spikes on GTO-Thyristors
- High ripple current D.C. filtering
- For high pulse and high frequency application

## ■ Specifications

Reference Standard	GB/T 17702 (IEC 61071)	
Climatic Category	40/85/56	
Operating temperature range(case)	-40°C~ 85°C	
Rated Voltage ( $U_N$ )	700Vdc ~ 9 000Vdc	
Capacitance Tolerance	$\pm 5\%$ (J), $\pm 10\%$ (K)	
Test voltage between terminals ( $U_{T-T}$ )	$1.5U_N$ (10s)	
Test voltage between case and terminal ( $U_{T-c}$ )	$U_N < 1\ 500Vdc, 3\ 000Vac(10s, 50Hz, 20^\circ C \pm 5^\circ C)$ $U_N \geq 1\ 500Vdc, (\sqrt{2} U_N + 1\ 000)Vac(10s, 50Hz, 20^\circ C \pm 5^\circ C)$	
Dissipation Factor	$5 \times 10^{-4}$ (1kHz, 20°C)	
Insulation Resistance ( $IR \times C_N$ )	$\geq 10\ 000s(20^\circ C, 500Vdc, 1min)$	
Expected lifetime	$\geq 100\ 000h @ U_N, \theta_{hs}=70^\circ C$	
Max. Torque of terminals	M6: 5 N·m	M8: 6 N·m
Installation	position	Any position
	Terminal form	Thread hole type
		Bolt type



# C3K

## Part number system

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C	3	K												

Digit 1 to 3 Series code C3K

Digit 4 to 5 D.C. rated voltage

1V=700V    2M=1 300V    7M=1 700V    3D=2 000V    3E=2 500V    3G=4 000V  
 6S=4 500V    7U=6 500V    4V=7 000V    5V=7 500V    3K=8 000V    2X=9 000V

Digit 6 to 8 Rated capacitance value  
 for example: 105=10×10<sup>5</sup>pF=1.0μF

Digit 9 Capacitance tolerance  
 J=±5%, K=±10%, N=0 ~10%

Digit 10~15 Internal use

## Technical data

C <sub>N</sub> (μF)	U <sub>N</sub> (Vdc)	U <sub>rms</sub> (Vac)	dV/dt (V/μs)	İ (A)	İ <sub>s</sub> (A)	I <sub>max</sub> 100kHz@70°C (A)	ESR @100kHz (mΩ)	L <sub>s</sub> (nH)	D ±1.0 (mm)	H ±1.0 (mm)	H ±1.0 (mm)	Part number
2.0	3000	280	300	600	1 800	35	1.8	50	90	67	6	C3K4Q205N*****
0.01	4000	800	8 000	80	240	3	39	25	30	37	7.5	C3K3G103+*****
5.0	4500	500	200	1 000	3 500	36	2.7	100	90	216	5	C3K6S505+*****
0.5	4500	1 500	500	250	750	42	1.2	50	90	56	3	C3K6S504+*****
0.55	7 000	2 500	400	270	710	41	1.8	50	90	116	7	C3K4V554+*****
0.25	7 000	4 000	1 000	250	750	31	2.9	100	90	180	5	C3K4V254+*****
0.35	7 000	4 000	1 000	350	1 050	38	2.1	100	90	180	5	C3K4V354+*****
0.5	7 000	4 000	500	250	750	45	1.9	100	90	180	5	C3K4V504+*****
0.01	7 500	2 500	2 000	20	60	4	50	100	30	98	3	C3K5V103+*****
0.33	8 000	5 000	1 000	330	990	39	2.0	50	90	129	6.5	C3K3K334+*****
0.1	9 000	4 500	1 500	150	450	26	5.0	100	90	149	6.5	C3K2X104+*****

- Note: 1. “.” =capacitance tolerance code, J=±5%, K=±10%.  
 2. “\*” = Pitch (refer to table 1) .  
 3. “\*\*\*\*” =terminal form code(refer to table 2)  
 4. “#” when the rated voltage is 630Vdc, the digit 4~5 is 2J.  
 5. “I<sub>max</sub>” at 100kHz, θ<sub>amb</sub>=70°C, θ<sub>case</sub>=85°C.  
 6. “ESR” 、 “L<sub>s</sub>” are typical values.