

# GTO 缓冲吸收电容 SMJ-TC series Snubber capacitor

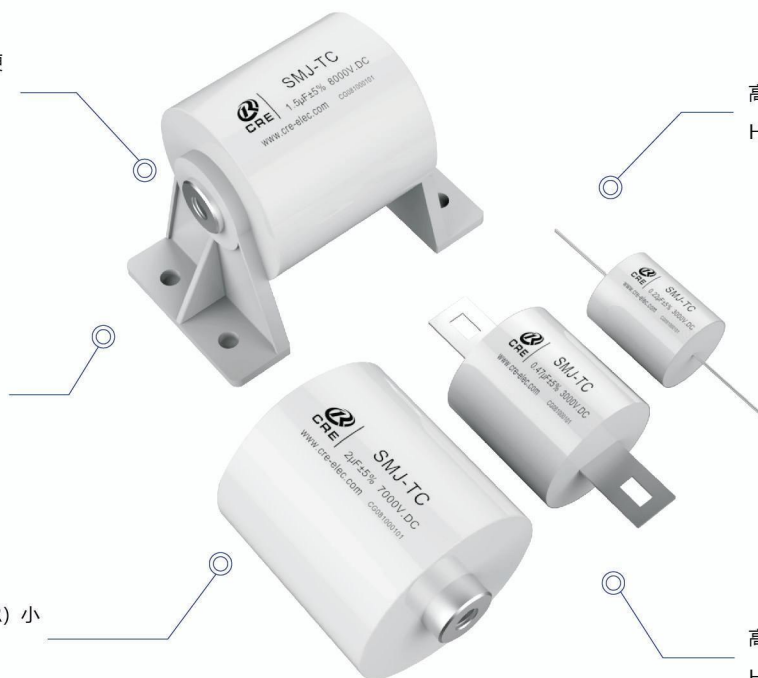
铜螺母引出, 体积小, 安装简单方便  
Copper nut leads, small size, easy  
installation

高频大电流承受能力  
High-frequency current capacity

迈拉胶带封装, 干式树脂灌注  
Myra tape encapsulation, dry  
resin infusion

自感 (ESL) 小, 等效串联 (ESR) 小  
Low ESL and ESR

高纹波电流, 高dv/dr承受能力  
High pulse current,  
high dv/dt withstand capability



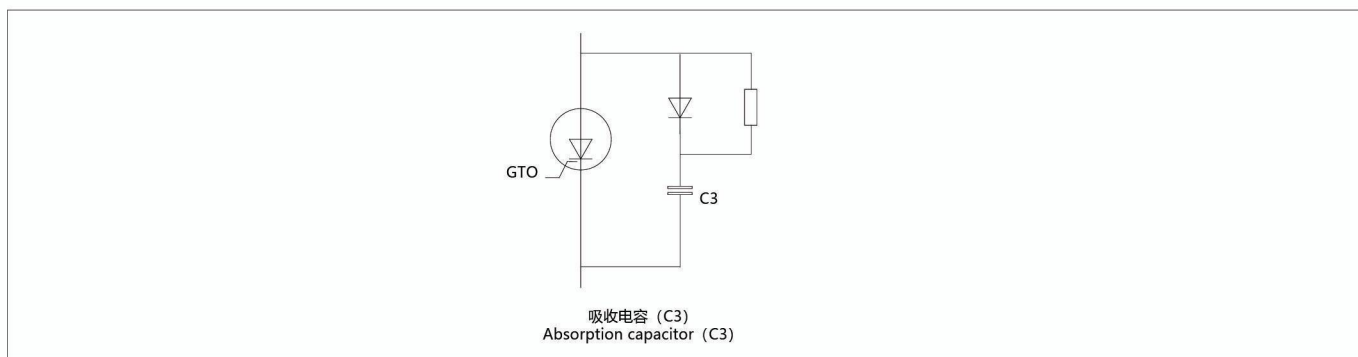
## 应用

- GTO缓冲吸收。
- 广泛应用于电力电子设备中开关器件关断时的尖峰电压, 尖峰电流吸收保护。

## Application

- GTO snubber.
- Widely used in power electronic electronic equipment when the peak voltage, peak current absorption protection

## 线路图 The circuit diagram

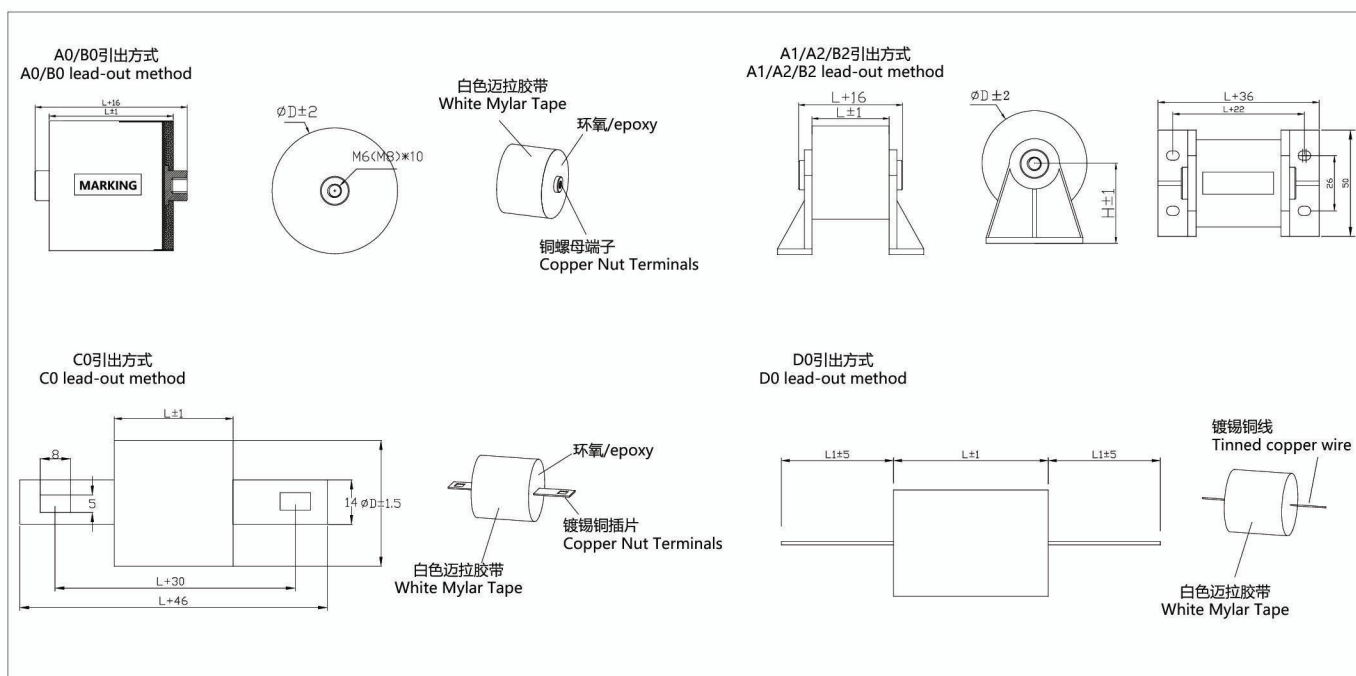


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## 性能参数 Technical data

工作温度范围/Operating temperature range	Max.Operating temperature.Top,max:+85°C
	Upper category temperatuer:+85°C
	Lower category temperatuer:-40°C
容量范围 (C <sub>N</sub> ) /Capacitance range	0.22μF~3μF
额定电压 (U <sub>N</sub> ) /Rated voltage	3000V.DC~10000V.DC
容量偏差/Cap.tol	±5% (J) ; ±10% (K)
耐电压/Withstand voltage	1.35U <sub>N</sub> /10s
损耗角正切/Dissipation factor	tgδ≤0.001 f=1kHz
绝缘电阻/Insulation resistance	C≤0.33μF R <sub>s</sub> ≥15000MΩ (at 20°C 100V.DC 60s )
	C>0.33μF R <sub>s</sub> ×C≥5000s (at 20°C 100V.DC 60s)
耐脉冲电流冲击/Withstand strike current	见附表/See attached table
预期寿命/Life expectancy	100000h (U <sub>N</sub> ; θ <sub>hotspot</sub> ≤70°C)
引用标准/Reference standard	IEC61071

## 外形图 The contour map



# GTO 缓冲吸收电容 SMJ-TC series

## Snubber capacitor

### 产品编码说明 Part number system

Model			Capacitance			U <sub>N</sub> (DC)					Cap. tol	Length		Lead	mounting bracket	Internal feature code	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
S	T	C	1	0	5	0	7	0	0	0	J	8	0	A	0	0	1

1 ~ 3 位: 型号代码/Model

4 ~ 6 位: 标称容量/Nominal Capacity

e.g. 105=10×10<sup>5</sup> pF=1μF

7 ~ 11 位: 额定电压 (直流) / U<sub>N</sub>(DC)

e.g. 07000=7000VDC

12 位: 容量偏差等级/Capacitance Tolerance

±5% (J) ; ±10% (K)

13 ~ 14 位: 长度/Length

e.g. 80=80mm

15 位: 引出形式/Lead

A: M6×10螺母引出/screw nut

B: M8×10螺母引出/screw nut

C: 直插片引出/Plated lead

D: 插针引出/Pin lead (φ1.2)

16 位: 安装支架代码: /mounting bracket

0: Non-bracket

1: 1类支架/ Class 1 bracket (H=35mm)

2: 2类支架/ Class 2 bracket (H=41mm)

3: 3类支架/ Class 3 bracket (H=37mm)

17 ~ 18 位: 内部特征码/Internal feature code



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规格表 Specification table

续上表

$C_N$ ( $\mu\text{F}$ )	$\phi D$ (mm)	L (mm)	ESL (nH)	dv/dt (V/ $\mu\text{S}$ )	$I_p$ (A)	$I_{rms}$ (A)	Part number
<b><math>U_N = 3000\text{V.DC}</math></b>							
0.22	35	44	25	1100	242	30	STC2243000*44****
0.33	43	44	25	1000	330	35	STC3343000*44****
0.47	51	44	22	850	399	45	STC4743000*44****
0.68	61	44	22	800	544	55	STC6843000*44****
1	74	44	20	700	700	65	STC1053000*44****
1.2	80	44	20	650	780	75	STC1253000*44****
1.5	52	70	30	600	900	45	STC1553000*70****
2	60	70	30	500	1000	55	STC2053000*70****
3	73	70	30	400	1200	65	STC3053000*70****
4	83	70	30	350	1400	70	STC4053000*70****
<b><math>U_N = 6000\text{V.DC}</math></b>							
0.22	43	60	25	1500	330	35	STC2246000*60****
0.33	52	60	25	1200	396	45	STC3346000*60****
0.47	62	60	25	1000	470	50	STC4746000*60****
0.68	74	60	22	900	612	60	STC6846000*60****
1	90	60	22	800	900	75	STC1056000*60****
<b><math>U_N = 7000\text{V.DC}</math></b>							
0.22	45	57	25	1100	242	30	STC2247000*57****
0.68	36	80	28	1000	680	25	STC6847000*80****
1	43	80	28	850	850	30	STC1057000*80****
1.5	52	80	25	800	1200	35	STC1557000*80****
1.8	57	80	25	700	1260	40	STC1857000*80****
2	60	80	23	650	1300	45	STC2057000*80****
3	73	80	22	500	1500	50	STC3057000*80****
<b><math>U_N = 8000\text{V.DC}</math></b>							
0.33	35	90	30	1100	363	25	STC3348000*90****
0.47	41	90	28	1000	470	30	STC4748000*90****
0.68	49	90	28	850	578	35	STC6848000*90****
1	60	90	25	800	800	40	STC1058000*90****
1.5	72	90	25	700	1050	45	STC1558000*90****
2	83	90	25	650	1300	50	STC2058000*90****
<b><math>U_N = 10000\text{V.DC}</math></b>							
0.33	45	114	35	1500	495	30	STC33410000*114****
0.47	54	114	35	1300	611	35	STC47410000*114****
0.68	65	114	35	1200	816	40	STC68410000*114****
1	78	114	30	1000	1000	55	STC10510000*114****
1.5	95	114	30	800	1200	70	STC15510000*114****

