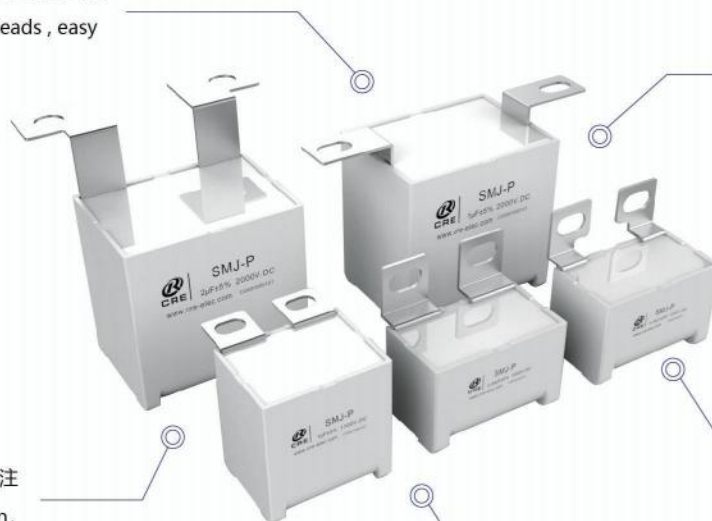


IGBT 缓冲吸收电容 SMJ-P series

Snubber capacitor

镀锡铜插片引出，方便IGBT各种孔距安装
Tin-plated copper inserts leads, easy installation for IGBT

塑料外壳封装，阻燃树脂灌注
Plastic shell encapsulation, dry resin infusion



耐压高，损耗(tgδ)小，温升低
Resistance to high voltage, low tgδ, low temperature rise

高脉冲电流，高dv/dt承受能力
High pulse current, high dv/dt withstand capability

自感(ESL)小，等效串联电阻(ESR)小
Low ESL and ESR

应用

- IGBT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

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

性能参数 Technical data

工作温度范围 / Operating temperature range	Max.Operating temperature.Top,max : + 105℃
	Upper category temperature:+85℃
	Lower category temperature:- 40℃
容量范围(C _N) / Capacitance range	0.1μF~5.6μF
额定电压(U _N) / Rated voltage	700V.DC ~ 3000V.DC
容量偏差 / Cap.tol	±5% (J) ; ±10% (K)
耐电压 / Withstand voltage	1.5U _{NDC} /10s
损耗角正切 / Dissipation factor	tgδ<0.0005 C<1μF f=10kHz
	tgδ< 0.001 C>1μF f=10kHz
绝缘电阻 / Insulation resistance	C ≤0.33μF R _s ≥30000 MΩ (at20℃ 100V.DC 60s)
	C > 0.33μF R _s ×C ≥10000s (at20℃ 100V.DC 60s)

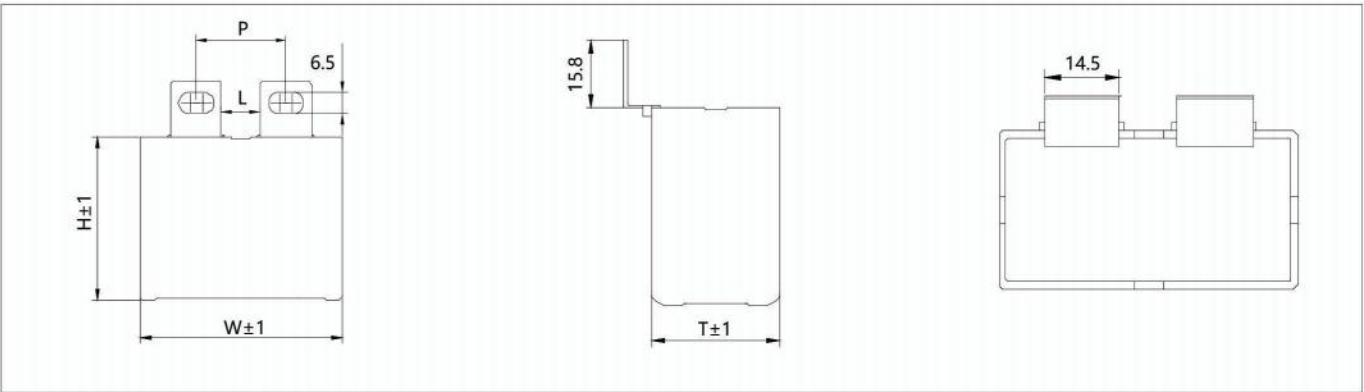


性能参数 Technical data

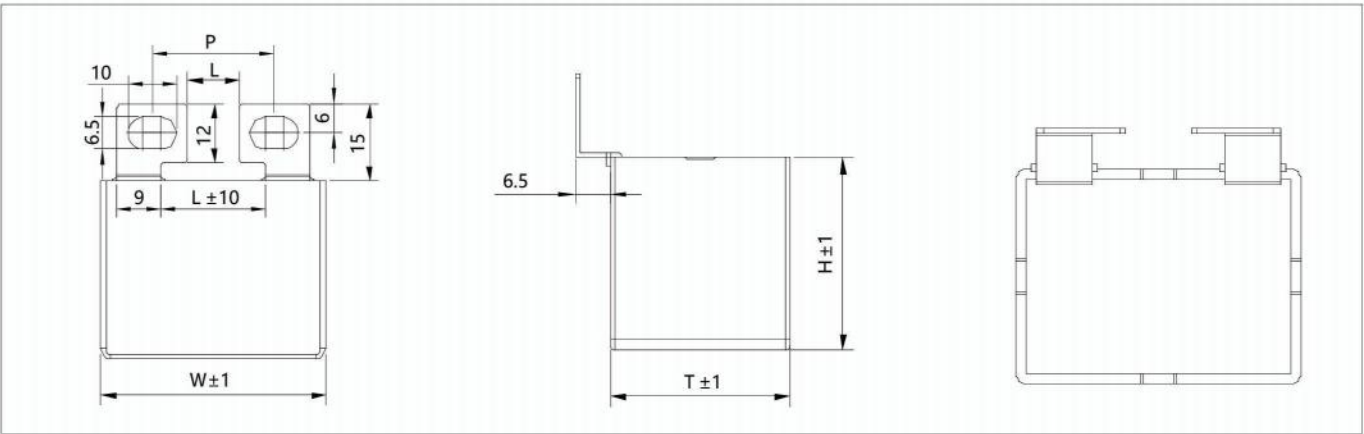
续上表

耐脉冲电流冲击 / Withstand strike current	具体见规格表/See the specification sheet
阻燃性 / Flame retardation	UL94V -0
预期寿命 / Life expectancy	100000h (U_N ; $\theta_{\text{hotspot}} \leq 85^{\circ}\text{C}$)
引用标准 / Reference standard	IEC61071 ; GB / T17702

尺寸图 Size chart



Type A0:				Output: M6
W	L	P	L	P
42.5	10.5	22 ~ 29		
57.5	10.5	22 ~ 29	25.5	37 ~ 44



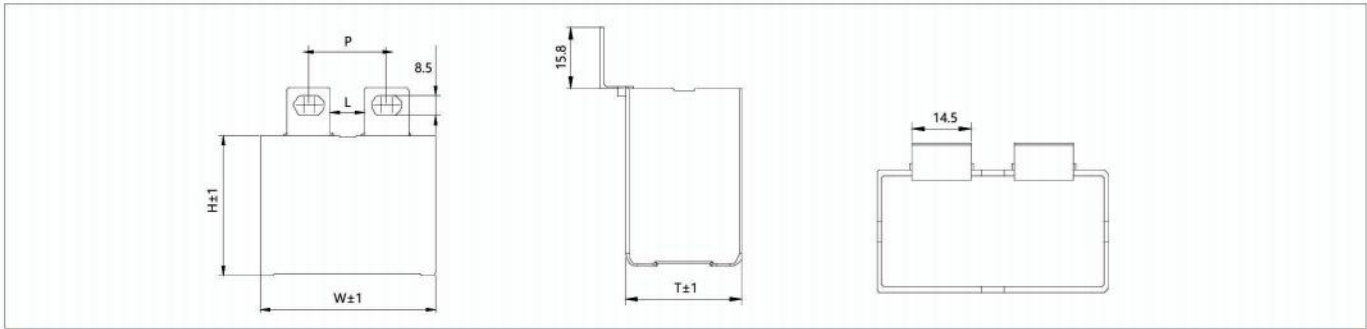
Type A1:				Output: M6
W	L	P	L	P
42.5	10.5	22 ~ 29		
57.5	10.5	22 ~ 29	25.5	37 ~ 44



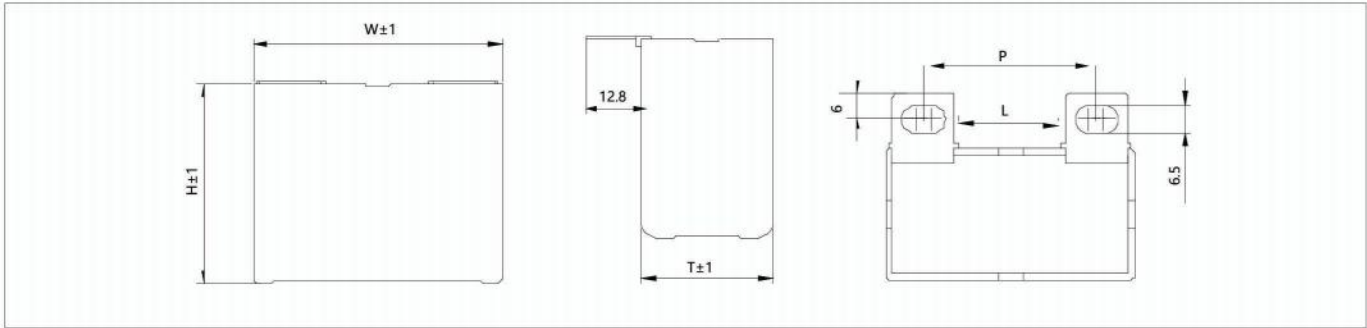
IGBT 缓冲吸收电容 SMJ-P series

Snubber capacitor

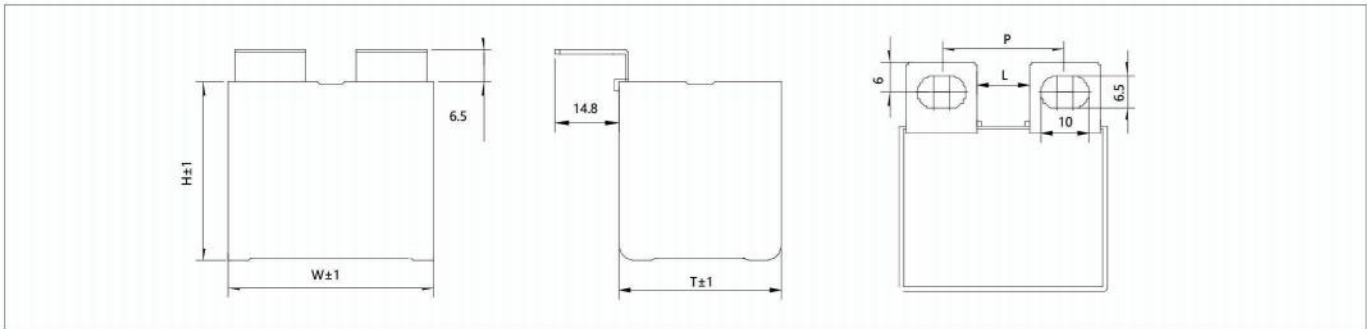
尺寸图 Size chart



Type A2:					Output: M8
W	L	P	L	P	
42.5	11	24 ~ 26	8	21 ~ 23	
57.5	11	24 ~ 26	24	37 ~ 39	



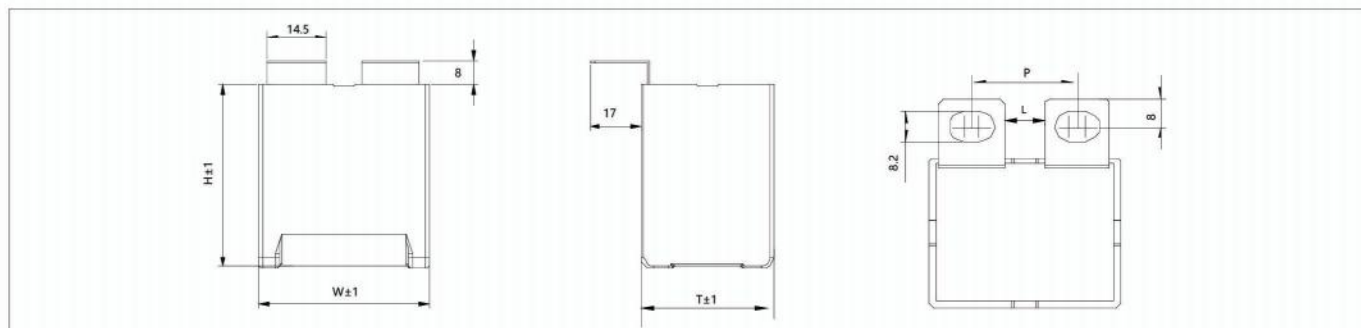
Type B0:					Output: M6
W	L	P	L	P	
42.5	10.5	22 ~ 29			
57.5	10.5	22 ~ 29	25.5	37 ~ 44	



Type B1:					Output: M6
W	L	P	L	P	
42.5	10.5	22 ~ 29			
57.5	10.5	22 ~ 29	25.5	37 ~ 44	



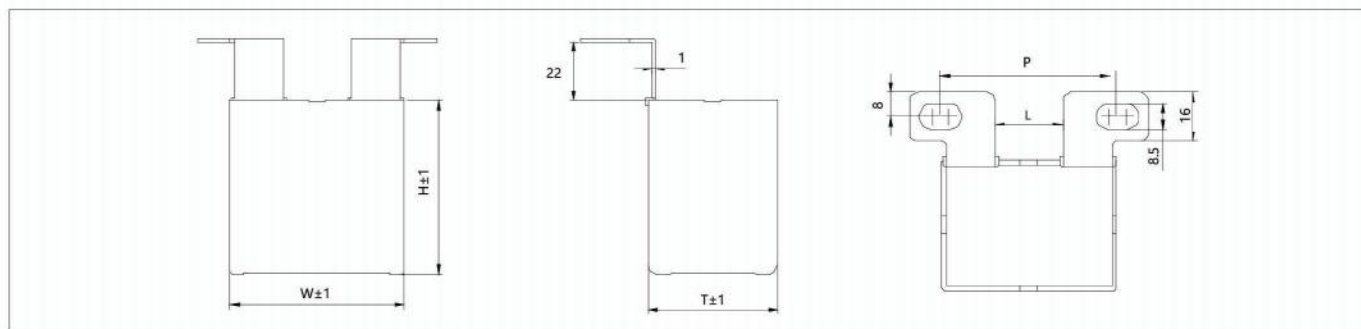
尺寸图 Size chart



Type B2:

Output: M8

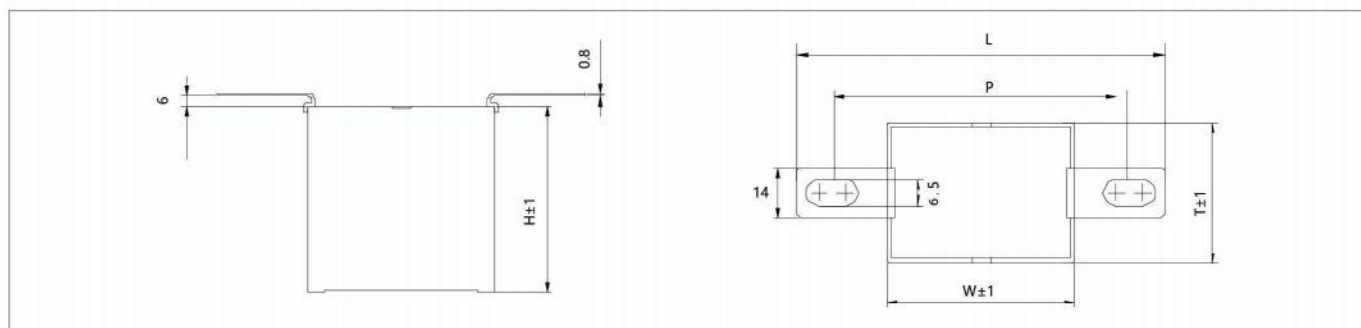
W	L	P	L	P
42.5	10.5	22 ~ 26	8.5	22 ~ 24
57.5	10.5	22 ~ 26	23.5	37 ~ 39



Type B3:

Output: M8

W	L	P	L	P
57.5	21	51.5 ~ 62.5		



Type C0:

Output: M6

W	L	P
42.5	80.5	60.5 ~ 64.5
57.5	95.5	75.5 ~ 79.5



IGBT 缓冲吸收电容 SMJ-P series

Snubber capacitor

产品编码说明 Part number system

Model			Capacitance			U _N (DC)				Cap. tol	Lead		L			Internal feature code	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
S	~	P	1	0	5	1	2	0	0	J	A	1	1	0	5	0	1
1	~	3	位: 型号代码/Model														
4	~	6	位: 标称容量/Nominal Capacity e.g. 105= 10×10 ⁵ pF= 1μF														
7	~	10	位: 额定电压（直流） / U _N (DC) e.g. 1200= 1200VDC														
		11	位: 容量偏差等级/Capacitance Tolerance ±5% (J) ; ±10% (K)														
12	~	13	位: 引出方式/Lead A0; A1; A2; A3 B0; B1: B2 C0 (See the specification sheet)														
14	~	16	位: 脚距L/Distance between mounting holes L e.g. 105= 10.5mm; 200= 20.0mm														
17	~	18	位: 内部特征码/Internal feature code														

规格表 Specification table

C _N (μF)	尺寸/Dimension (mm)			ESR @100kHz (mΩ)	ESL (nH)	dv/dt (V/μS)	I _p (A)	I _{rms} @100kHz85℃ (A)	Part number
	W	T	H						
U _N 700V.DC U _{rms} 400V.AC U _S 1050V									
0.47	42.5	24.5	27.5	12	25	500	235	8	S-P4740700*****
0.68	42.5	24.5	27.5	10	25	480	326.4	10	S-P6840700*****
1	42.5	24.5	27.5	8	24	450	450	12	S- P1050700*****
1.5	42.5	33.5	35.5	7	25	430	645	5	S-P1550700^*****
2	42.5	33	35.5	6	24	420	840	15	S-P2050700*****
2.5	42.5	33	45	6	23	400	1000	18	S-P2550700*****
3	42.5	33	45	5.5	22	380	1140	20	S-P3050700*****
3	57.5	30	45	5	26	350	1050	22	S-P3050700*****
3.5	42.5	33	45	5	23	350	1225	25	S-P3550700*****
3.5	57.5	30	45	6	25	300	1050	22	S-P3550700*****
4.7	57.5	35	50	5	28	280	1316	25	S-P4750700*****
5.6	57.5	38	54	4	30	250	1400	25	S-P5650700*****
6	57.5	38	54	3.5	33	230	1380	28	S-P6050700*****
6.8	57.5	42.5	56	3.2	32	220	1496	32	S-P6850700*****
8	57.5	42.5	56	2.8	30	200	1600	33	S-P8050700*****
U _N 1000V.DC U _{rms} 500V.AC U _S 1500V									
0.47	42.5	24.5	27.5	11	25	1000	470	10	S-P4741000*****
0.68	42.5	24.5	27.5	8	25	800	544	12	S-P6841000*****^1
1	42.5	33.5	35.5	6	24	800	800	15	S-P10 51000**^*****
1.5	42.5	33	45	6	24	700	1050	15	S-P1551000*****
2	42.5	33	45	5	22	700	1400	20	S-P2051000*****
2.5	57.5	30	45	5	30	600	1500	22	S-P2551000*****
3	57.5	35	50	4	30	600	1800	25	S-P3051000*****



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规格表 Specification table

续上表

C _N (μF)	尺寸/Dimension (mm)			ESR @100kHz (mΩ)	ESL (nH)	dv/dt (V/μS)	I _p (A)	I _{rms} @100kHz85°C (A)	Part number
	W	T	H						
U _N 1000V.DC U _{rms} 500V.AC U _s 1500V									
3.3	57.5	35	50	3.5	28	550	1815	25	S-P3351000*****
3.5	57.5	38	54	3.5	28	500	1750	25	S-P3551000*****
4	57.5	38	54	3.2	26	500	2000	28	S-P4051000*****
4.7	57.5	42.5	56	3	25	420	1974	30	S-P4751000*****
5.6	57.5	42.5	56	2.8	24	400	2240	32	S-P5651000*****
U _N 1200V.DC U _{rms} 550V.AC U _s 1800V									
0.47	42.5	24.5	27.5	11	24	1200	564	10	S-P4741200*****
0.68	42.5	33.5	35.5	7	23	1100	748	12	S-P6841200*****
1	42.5	33.5	35.5	6	22	800	800	14	S-P1051200*****
1.5	42.5	33	45	5	20	800	1200	15	S-P1551200*****
2	57.5	30	45	4	30	750	1500	20	S-P2051200*****
2.5	57.5	35	50	4	28	700	1750	25	S-P2551200*****
3	57.5	35	50	4	27	600	1800	25	S-P3051200*****
3.3	57.5	38	54	4	27	550	1815	28	S-P3351200*****
3.5	57.5	38	54	3.5	25	500	1750	28	S-P3551200*****
4	57.5	42.5	56	3.5	25	450	1800	30	S-P4051200*****
4.7	57.5	42.5	56	3.2	23	420	1974	32	S-P4751200*****
U _N 1700V.DC U _{rms} 575V.AC U _s 2250V									
0.33	42.5	24.5	27.5	12	25	1300	429	9	S-P3341700*****
0.47	42.5	24.5	27.5	10	24	1300	611	10	S-P4741700*****
0.68	42.5	33.5	35.5	8	23	1300	884	12	S-P6841700*****
1	42.5	33	45	7	22	1200	1200	15	S-P1051700*****
1.5	42.5	33	45	6	22	1200	1800	18	S-P1551700*****
1.5	57.5	30	45	5	31	1200	1800	20	S-P1551700*****
2	57.5	30	45	5	30	1100	2200	22	S-P2051700*****
2.5	57.5	35	50	4	28	1100	2750	25	S-P2551700*****
3	57.5	38	54	4	27	700	2100	25	S-P3051700*****
3.3	57.5	38	54	3.8	26	600	1980	28	S-P3351700*****
3.5	57.5	42.5	56	3.5	25	500	1750	30	S-P3551700*****
4	57.5	42.5	56	3.2	25	450	1800	32	S-P4051700*****
U _N 2000V.DC U _{rms} 700V.AC U _s 3000V									
0.22	42.5	24.5	27.5	15	25	1500	330	10	S-P2242000*****
0.33	42.5	33.5	35.5	12	24	1500	495	12	S-P3342000*****
0.47	42.5	33.5	35.5	11	23	1400	658	15	S-P4742000*****
0.68	42.5	33	45	8	22	1200	816	18	S-P6842000*****
0.68	57.5	30	45	7	30	1100	748	20	S-P6842000*****
0.82	42.5	33	45	7	28	1200	984	22	S-P8242000*****
1	57.5	30	45	6	28	1100	1100	25	S-P1052000*****
1.5	57.5	35	50	5	25	1000	1500	28	S-P1552000*****
2	57.5	38	54	5	24	800	1600	28	S-P2052000*****
2.2	57.5	42.5	56	4	23	700	1540	32	S-P2252000*****
U _N 3000V.DC U _{rms} 750V.AC U _s 4500V									
0.15	42.5	33	45	18	28	2500	375	25	S-P1543000*****
0.22	42.5	33	45	15	27	2200	484	28	S-P2243000*****
0.22	57.5	35	50	15	25	2000	330	20	S-P2243000*****
0.33	57.5	35	50	12	24	1800	495	20	S-P3343000*****
0.47	57.5	38	54	11	23	1600	752	22	S-P4743000*****
0.68	57.5	42.5	56	8	22	1500	1020	28	S-P6843000*****



阻尼吸收电容器 SMJ-MC series

Damping Absorption Capacitor

产品采用无感辊技术，高真空浸渍工艺

Products using non-sensitive roll technology,
high vacuum impregnation process

固体介质：聚丙烯薄膜 (PP)

Solid medium: polypropylene film (PP)

磨砂氧化圆柱形铝壳

Frosted and oxidised cylindrical
aluminium case

液体介质填料：苄基甲苯或PEPE，不含PCB

Liquid medium filler: benzyltoluene
or PEPE, PCB free



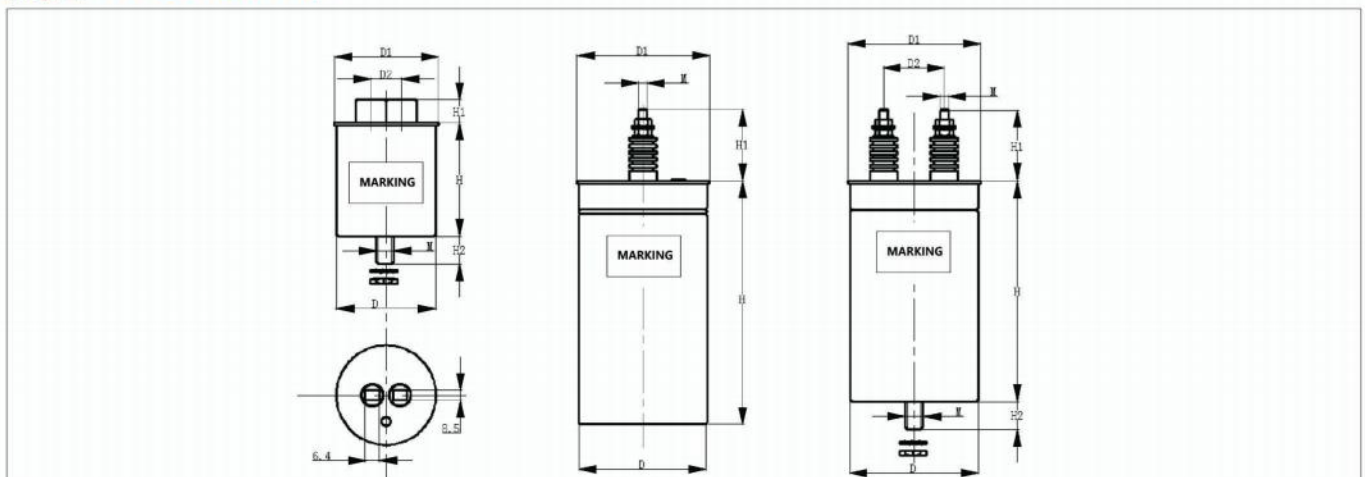
应用

- 主要用于限制电路中电压过高的上升速率，以保护电力电子中半导体的开关和保护；
- 滤波和储能；
- 主要应用领域为整流器、SVC、机车电源等。

Application

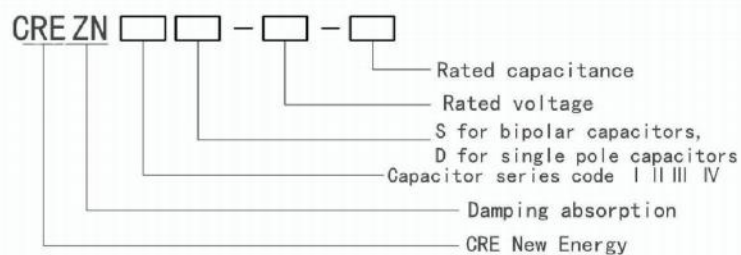
- Mainly used to limit the rise rate of excessive voltage in circuits to protect switching and protection of semiconductors in power electronics.
- filtering and energy storage.
- The main application areas are rectifiers, SVCs, locomotive power supplies, etc.

外形图 The contour map



01

型号说明 Model Description



规格表 Specification table

C_N (μF)	I_{max} (A_{rms})	$\hat{I}$ (kA)	I_S (kA)	D (mm)	H (mm)	Bottom bolts	Model
U_N 1000V AC U_{NDC} 1700V DC U_S 2500V U_{BB} 1500V AC U_{BG} 2400V AC							
0.1	10	0.2	1.2	50	55	M8	CREZN-1kVAC-0.1 μF
0.22	10	0.2	1.6	50	55	M8	CREZN-1kVAC-0.22 μF
0.33	10	0.2	1.6	50	55	M8	CREZN-1kVAC-0.33 μF
0.47	10	0.2	1.6	50	55	M8	CREZN-1kVAC-0.47 μF
0.5	10	0.2	1.6	50	55	M8	CREZN-1kVAC-0.5 μF
1	18	0.2	1.6	50	75	M8	CREZN-1kVAC-1 μF
2	18	0.3	2	50	75	M8	CREZN-1kVAC-2 μF
3	18	0.5	2.8	60	90	M12	CREZN-1kVAC-3 μF
4	18	0.7	3	60	122	M12	CREZN-1kVAC-4 μF
6	18	0.9	3.5	60	152	M12	CREZN-1kVAC-6 μF
10	18	1.2	4	76	152	M12	CREZNIIS-500VAC/1kVAC-10 μF
U_N 1600V AC U_{NDC} 2500V DC U_S 3800V U_{BB} 2400V AC U_{BG} 3300V AC							
0.1	10	0.2	1.2	50	55	M8	CREZN-1.6kVAC-0.1 μF
0.22	10	0.2	1.6	50	55	M8	CREZN-1.6kVAC-0.22 μF
0.33	10	0.2	1.6	50	75	M12	CREZN-1.6kVAC-0.33 μF
0.47	18	0.2	1.6	50	75	M12	CREZN-1.6kVAC-0.47 μF
0.5	18	0.2	1.6	50	75	M12	CREZN-1.6kVAC-0.5 μF
1	18	0.2	1.6	60	90	M8	CREZN-1.6kVAC-1 μF
2	18	0.3	2	60	122	M12	CREZN-1.6kVAC-2 μF
3	18	0.5	2.8	60	152	M12	CREZNIIS-1.6kVAC-3 μF
4	18	0.7	3	76	122	M12	CREZNIIS-1.6kVAC-4 μF
6	18	0.9	3.5	76	152	M12	CREZNIIS-1.6kVAC-6 μF
10	18	1.2	4	96	152	M16	CREZNIIS-1.6kVAC-10 μF



阻尼吸收电容器 SMJ-MC series

Damping Absorption Capacitor

规格表 Specification table

C_N (μF)	I_{max} (A_{rms})	I^* (kA)	I_s (kA)	D (mm)	H (mm)	Bottom bolts	Model
U_N 2000V AC U_{NDC} 3000V DC U_s 4500V U_{BB} 3000V AC U_{BG} 3800V AC							
0.1	10	0.2	1.2	50	55	M8	CREZN-2kVAC-0.1 μF
0.22	10	0.2	1.6	50	55	M8	CREZN-2kVAC-0.22 μF
0.33	10	0.2	1.6	50	75	M8	CREZN-2kVAC-0.33 μF
0.47	18	0.2	1.6	50	75	M12	CREZN-2kVAC-0.47 μF
0.5	18	0.2	1.6	50	75	M12	CREZN-2kVAC-0.5 μF
1	18	0.2	1.6	60	90	M12	CREZN-2kVAC-1 μF
2	18	0.3	2	76	122	M12	CREZNIIS-2kVAC-2 μF
3	18	0.5	2.8	76	122	M12	CREZNIIS-2kVAC-3 μF
4	18	0.7	3	76	152	M12	CREZNIIS-2kVAC-4 μF
6	18	0.9	3.5	86	152	M12	CREZNIIS-2kVAC-6 μF
10	18	1.2	4	106	152	M16	CREZNIIS-2kVAC-10 μF
U_N 2500V AC U_{NDC} 4000V DC U_s 6000V U_{BB} 3750V AC U_{BG} 4500V AC							
0.1	10	0.2	1.4	60	60	M12	CREZN-2.5kVAC-0.1 μF
0.22	10	0.2	1.8	60	60	M12	CREZN-2.5kVAC-0.22 μF
0.33	10	0.2	1.8	60	90	M12	CREZN-2.5kVAC-0.33 μF
0.47	18	0.2	1.8	60	90	M12	CREZN-2.5kVAC-0.47 μF
0.5	18	0.2	1.8	60	90	M12	CREZN-2.5kVAC-0.5 μF
1	18	0.2	1.8	60	122	M12	CREZNIIS-2.5kVAC-1 μF
2	18	0.4	2.2	76	122	M12	CREZNIIS-2.5kVAC-2 μF
3	18	0.6	3	76	152	M12	CREZNIIS-2.5kVAC-3 μF
4	18	0.8	3.5	86	152	M16	CREZNIIS-2.5kVAC-4 μF
6	18	1	4	106	152	M16	CREZNIIS-2.5kVAC-6 μF
10	18	1.5	4.5	116	182	M16	CREZNIIS-2.5kVAC-10 μF
U_N 3000V AC U_{NDC} 4500V DC U_s 6750V U_{BB} 4500V AC U_{BG} 5200V AC							
0.1	18	0.4	1.6	60	60	M12	CREZN-3kVAC-0.1 μF
0.22	18	0.6	2	60	60	M12	CREZN-3kVAC-0.22 μF
0.33	18	0.6	2	60	60	M12	CREZN-3kVAC-0.33 μF
0.47	18	0.6	2	60	90	M12	CREZN-3kVAC-0.47 μF
0.5	18	0.6	2	60	122	M12	CREZN-3kVAC-0.5 μF
1	18	0.7	2	76	122	M12	CREZNIIS-3kVAC-1 μF
2	18	1.5	4	76	152	M12	CREZNIIS-3kVAC-2 μF
3	18	1.8	6	96	152	M16	CREZNIIS-3kVAC-3 μF
4	18	3.5	8	106	152	M16	CREZNIIS-3kVAC-4 μF
6	18	4	12	106	182	M16	CREZNIIS-3kVAC-6 μF
10	18	5	14	116	272	M16	CREZNIIS-3kVAC-10 μF
U_N 4000V AC U_{NDC} 5000V DC U_s 7500V U_{BB} 6000V AC U_{BG} 6600V AC							
0.1	18	0.5	1.8	76	122	M12	CREZNIIS-4kVAC-0.1 μF
0.22	18	0.7	2.2	76	122	M12	CREZNIIS-4kVAC-0.22 μF



规格表 Specification table

C_N (μF)	I_{max} (A_{rms})	I' (kA)	I_s (kA)	D (mm)	H (mm)	Bottom bolts	Model
U_N 4000V AC U_{NDC} 5000V DC U_s 7500V U_{BB} 6000V AC U_{BG} 6600V AC							
0.33	18	0.7	2.2	76	122	M12	CREZNIIS-4kVAC-0.33 μF
0.47	18	0.7	2.2	76	122	M12	CREZNIIS-4kVAC-0.47 μF
0.5	18	0.7	2.2	76	122	M12	CREZNIIS-4kVAC-0.5 μF
1	18	0.8	2.4	86	152	M12	CREZNIIS-4kVAC-1 μF
2	18	1.7	5	106	152	M16	CREZNIIS-4kVAC-2 μF
3	18	2	7	106	182	M12	CREZNIIS-4kVAC-3 μF
4	18	3.7	11	106	272	M16	CREZNIIS-4kVAC-4 μF
U_N 5000V AC U_{NDC} 8000V DC U_s 12000V U_{BB} 7500V AC							
0.1	18	1	2	76	122	M12	CREZNIID-5kVAC-0.1 μF
0.22	18	1.2	2.5	76	122	M12	CREZNIID-5kVAC-0.22 μF
0.33	18	1.2	2.5	76	152	M12	CREZNIID-5kVAC-0.33 μF
0.47	18	1.2	2.5	76	152	M12	CREZNIID-5kVAC-0.47 μF
0.5	18	1.2	2.5	76	152	M12	CREZNIID-5kVAC-0.5 μF
1	18	1.5	4	106	152	M12	CREZNIID-5kVAC-1 μF
2	18	2	6	116	182	M16	CREZNIID-5kVAC-2 μF
3	18	2.4	9	116	272	M12	CREZNIID-5kVAC-3 μF
U_N 6000V AC U_{NDC} 9000V DC U_s 13500V U_{BB} 8000V AC							
0.1	18	1.2	2.5	76	122	M12	CREZNIID-6kVAC-0.1 μF
0.22	18	1.5	3	76	152	M12	CREZNIID-6kVAC-0.22 μF
0.33	18	1.5	3	76	152	M12	CREZNIID-6kVAC-0.33 μF
0.47	18	1.5	3	76	152	M12	CREZNIID-6kVAC-0.47 μF
0.5	18	1.5	3	86	152	M12	CREZNIID-6kVAC-0.5 μF
1	18	2	6	106	152	M12	CREZNIID-6kVAC-1 μF
2	18	3	6	116	202	M16	CREZNIID-6kVAC-2 μF
U_N 7000V AC U_{NDC} 10000V DC U_s 15000V U_{BB} 10500V AC							
0.1	18	1.8	4	76	122	M12	CREZNIID-7kVAC-0.1 μF
0.22	18	2.2	6	76	152	M12	CREZNIID-7kVAC-0.22 μF
0.33	18	2.2	6	86	152	M12	CREZNIID-7kVAC-0.33 μF
0.47	18	2.2	6	86	152	M12	CREZNIID-7kVAC-0.47 μF
0.5	18	2.2	6	86	152	M12	CREZNIID-7kVAC-0.5 μF
1	18	4	12	106	182	M12	CREZNIID-7kVAC-1 μF
2	18	6	12	116	272	M16	CREZNIID-7kVAC-2 μF



IGBT 缓冲吸收电容 SMJ-TE series

Snubber capacitor



应用

- IGBT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

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

性能参数 Technical data

工作温度范围 / Operating temperature range	Max.Operating temperature.,Top,max : + 85°C
	Upper category temperature: +85°C
	Lower category temperature : - 40°C
容量范围(C_N) / Capacitance range	0.1 μF ~ 5.6 μF
额定电压(U_N) / Rated voltage	630V.DC ~ 2000V.DC
容量偏差 / Cap.tol	$\pm 5\%(J)$; $\pm 10\%(K)$
耐电压 / Withstand voltage	1.5 U_{NDC} / 10s
损耗角正切 / Dissipation factor	$\text{tg}\delta \leq 0.0005$ $C < 1\mu\text{F}$ $f = 10\text{kHz}$
	$\text{tg}\delta \leq 0.001$ $C \geq 1\mu\text{F}$ $f = 10\text{kHz}$
绝缘电阻/Insulation resistance	$C \leq 0.33\mu\text{F}$ $R_s \geq 30000 \text{ M}\Omega$ (at 20°C 100V.DC 60s)
	$C > 0.33\mu\text{F}$ $R_s \times C \geq 10000\text{s}$ (at 20°C 100V.DC 60s)

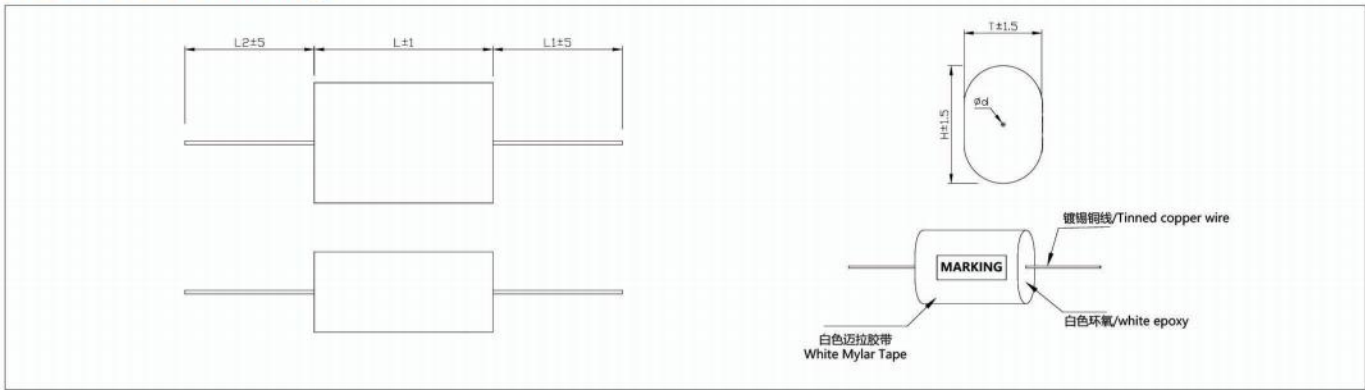


性能参数 Technical data

续上表

耐脉冲电流冲击 / Withstand strike current	具体见规格表/See the specification sheet
预期寿命/Life expectancy	100000h (U_N ; $\theta_{\text{hotspot}} \leq 85^\circ\text{C}$)
引用标准/Reference standard	IEC61071;GB/T17702

外形图 The contour map



产品编码说明 Part number system

Model			Capacitance			U _N (DC)				Cap. tol	Length		Lead	Internal feature code	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
S	T	E	4	7	4	1	2	0	0	J	4	4	A	0	1
1	~	3	位:	型号代码/Model											
4	~	6	位:	标称容量/Nominal Capacity											
			e.g. 474=47×10 ⁴ pF=0.47μF												
7	~	10	位:	额定电压（直流） / U _N (DC)											
			e.g. 1200=1200VDC												
			11	位:	容量偏差等级/Capacitance Tolerance										
			±5% (J) ; ±10% (K)												
12	~	13	位:	长度/Length											
			e.g. 44=44mm												
			14	位:	引出形式/Lead										
			A: Φ0.8×30												
			B: Φ1.0×42												
			C: Φ1.2×42												
15	~	16	位:	内部特征码/Internal feature code											



IGBT 缓冲吸收电容 SMJ-TE series

Snubber capacitor

规格表 Specification table

C _N (μF)	L (mm)	T (mm)	H (mm)	φD (mm)	ESR @100kHz (mΩ)	ESL (nH)	dv/dt (V/μs)	I _p (A)	I _{rms} @25°C 100kHz (A)	Part number
U _N 630V.DC U _{rms} 400V.AC U _s 945V										
0.22	32	9.5	17.5	0.8	16	23	300	66	5.3	STE2240630*32A**
0.33	32	12	20	1	13	22	200	66	6.5	STE3340630*32B**
0.47	32	14.5	22.5	1	11	21	220	103.4	8.3	STE4740630*32B**
0.68	32	18	26	1	10	20	180	122.4	9.5	STE6840630*32B**
1	37	11	19	1	8	28	150	150	7.6	STE1050630*37B**
1.5	37	13.5	21.5	1	7	27	150	225	9.5	STE1550630*37B**
2	37	16	24	1.2	6	24	130	260	10.2	STE2050630*37C**
2.5	37	18	26	1.2	5.5	25	120	300	10.5	STE2550630*37C**
3	37	20	28	1.2	5	30	110	330	10.8	STE3050630*37C**
3.3	37	21	29	1.2	4.5	30	110	363	11.2	STE3350630*37C**
4	57	27	36.5	1.2	4.2	32	220	880	12.8	STE4050630*57C**
4.7	57	28	40.5	1.2	3.8	32	200	940	13.8	STE4050630*57C**
5.6	57	31	33.5	1.2	3.5	32	185	1036	13.5	STE5650630*57C**
6.8	37	29	41.5	1.2	2.5	28	100	680	13.8	STE6850630*37C**
6.8	57	34	46.5	1.2	2.8	30	180	1224	14.2	STE6850630*57C**
U _N 1000V.DC U _{rms} 500V.AC U _s 1500V										
0.15	32	10	17.5	0.8	20	20	1100	165	5.5	STE1541000*32A**
0.22	32	12	20	1	15	21	1000	220	7.3	STE2241000*32B**
0.33	32	15.5	23	1	13	21	1000	330	8.7	STE3341000*32B**
0.47	32	18.5	26	1.2		23	1000	470	10.5	STE4741000*32C**
0.47	44	14	22	1.2	9	24	900	423	9.5	STE4741000*44C**
0.15	32	10	17.5	0.8	20	20	1100	165	5.5	STE1541000*32A**
0.22	32	12	20	1	15	21	1000	220	7.3	STE2241000*32B**
0.33	32	15.5	23	1	13	21	1000	330	8.7	STE3341000*32B**
0.47	32	18.5	26	1.2		23	1000	470	10.5	STE4741000*32C**
0.47	44	14	22	1.2	9	24	900	423	9.5	STE4741000*44C**
0.68	32	20	32.5	1.2	7	25	900	612	10.8	STE6841000*32C**
0.68	44	17	25	1.2	6	26	800	544	10.2	STE6841000*44C**
1	44	21.5	29.5	1.2	5.6	27	900	900	11	STE1051000*44C**
1.5	44	26	35.5	1.2	5	29	900	1350	12	STE1551000*44C**
1.5	57	21	29	1.2	5	30	700	1050	12.2	STE1551000*57C**
2	44	28	40.5	1.2	4.8	30	800	1600	13.2	STE2051000*44C**



规格表 Specification table

续上表

C _N (μF)	L (mm)	T (mm)	H (mm)	φD (mm)	ESR @100kHz (mΩ)	ESL (nH)	dv/dt (V/μS)	I _p (A)	I _{rms} @25°C 100kHz (A)	Part number
U _N 1000V.DC U _{rms} 500V.AC U _s 1500V										
1.5	57	21	29	1.2	5	30	700	1050	12.2	STE1551000*57C**
2	44	28	40.5	1.2	4.8	30	800	1600	13.2	STE2051000*44C**
2	57	24	33.5	1.2	4.8	32	600	1200	12.8	STE2051000*57C**
2.2	44	30	42.5	1.2	4.2	32	600	1320	13.8	STE2251000*44C**
2.2	57	25	34.5	1.2	4.2	32	500	1100	13.5	STE2251000*57C**
2.5	57	25	38	1.2	4	33	500	1250	14.2	STE2551000*57C**
3	57	28	40.5	1.2	3.5	34	480	1440	15.6	STE3051000*57C**
3.3	57	29.5	42	1.2	3.2	35	450	1485	16.5	STE3351000*57C**
3.5	57	30.5	43	1.2	3.2	35	450	1575	17.2	STE3551000*57C**
4.7	57	35	50.5	1.2	3	36	420	1974	17.8	STE4751000*57C**
5.6	57	38.5	65	1.2	2.8	38	400	2240	18.2	STE5651000*57C**
U _N 1200V.DC U _{rms} 550V.AC U _s 1800V										
0.1	32	8.5	16	0.8	20	20	1300	130	6	STE1041200*32A**
0.15	32	10	17.5	1	18	20	1200	180	7.5	STE1541200*32B**
0.22	32	13	21	1	15	22	1200	264	8.3	STE2241200*32B**
0.33	32	16	24	1	12	23	1200	396	9	STE3341200*32B**
0.47	32	17.5	30	1.2	10	23	1200	564	9.5	STE4741200*32C**
0.47	44	15	23	1.2	9	26	1100	517	9.8	STE4741200*44C**
0.68	32	21.5	34	1.2	8	25	1100	517	10	STE6841200*32C**
0.68	44	18.5	26.5	1.2	6	27	1000	680	11.7	STE6841200*44C**
1	44	23	31	1.2	5	28	1000	1000	12.4	STE1051200*44C**
1.5	44	26.5	39	1.2	5	30	950	1425	13.5	STE1551200*44C**
1.5	57	22.5	30.5	1.2	5	29	900	1350	12.6	STE1551200*57C**
2	44	29	45	1.2	5	30	800	1600	14.2	STE2051200*44C**
2	57	26.5	34.5	1.2	4.8	30	750	1500	13.8	STE2051200*57C**
2.2	44	31	47	1.2	4.2	32	800	1760	14.5	STE2251200*44C**
2.2	57	27.5	35.5	1.2	4.2	35	700	1540	14.5	STE2251200*57C**
3	57	29	44.5	1.2	3.2	37	500	1500	17.2	STE3051200*57C**
3.3	57	30.5	46	1.2	3.2	38	450	1485	17.8	STE3351200*57C**
4.7	57	38	53.5	1.2	3	38	420	1974	18.2	STE4751200*57C**
U _N 1700V.DC U _{rms} 575V.AC U _s 2550V										
0.1	32	9.5	17.5	0.8	18	25	1300	130	7.5	STE1041700*32A**
0.15	32	12	20	1	16	24	1200	180	8.5	STE1541700*32B**



IGBT 缓冲吸收电容 SMJ-TE series

Snubber capacitor

规格表 Specification table

续上表

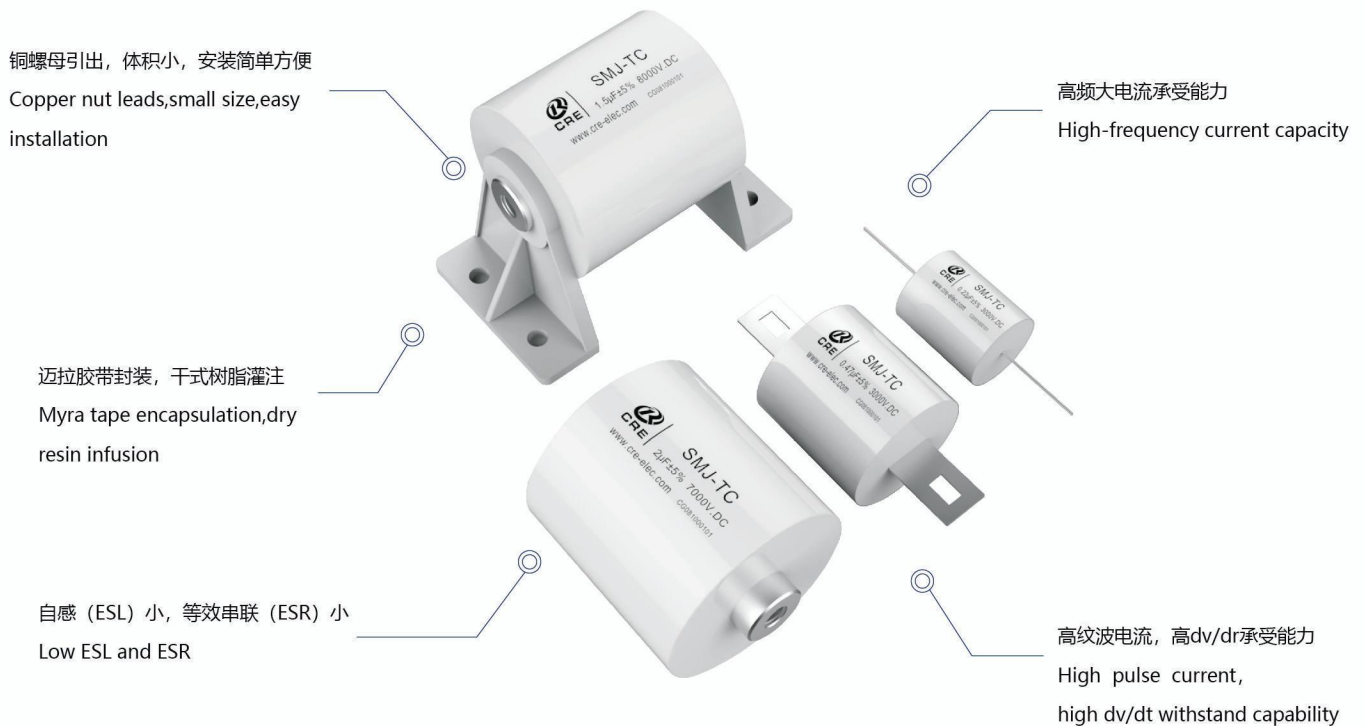
C _N (μF)	L (mm)	T (mm)	H (mm)	φD (mm)	ESR @100kHz (mΩ)	ESL (nH)	dv/dt (V/μs)	I _p (A)	I _{rms} @25°C 100kHz (A)	Part number
U _N 1700V.DC U _{rms} 575V.AC U _s 2550V										
0.22	32	15	23	1	15	24	1200	264	9.3	STE2241700*32B**
0.33	32	18.5	26.5	1	12	22	1200	396	9.9	STE3341700*32B**
0.33	44	13.5	21.5	1.2	12	29	1100	363	10.2	STE3341700*44C**
0.47	44	16	24	1.2	9	28	1000	470	11.2	STE4741700*44C**
0.68	44	20	28	1.2	8	27	1000	680	11.7	STE6841700*44C**
1	44	24	33.5	1.2	5.6	26	900	900	12.4	STE1051700*44C**
1	57	19.5	27.5	1.2	6	33	850	850	10.8	STE1051700*57C**
1.5	44	28	40.5	1.2	4.8	25	800	1200	13.5	STE1551700*44C**
1.5	57	24	32	1.2	5	33	750	1125	13.5	STE1551700*57C**
2	44	31.5	47	1.2	4.5	24	750	1500	14.2	STE2051700*44C**
2	57	27.5	37	1.2	4.8	32	650	1300	12.8	STE2051700*57C**
2.2	44	33.5	49	1.2	4.5	34	700	1540	15.6	STE2251700*44C**
2.2	57	29	40	1.2	4.2	32	600	1320	14.5	STE2251700*57C**
3	57	31	46.5	1.2	4	30	560	1680	17.2	STE3051700*57C**
3.3	57	33	48.5	1.2	3.2	29	500	1650	17.6	STE3351700*57C**
4	57	37	52.5	1.2	3	28	450	1800	18.2	STE4051700*57C**
U _N 2000V.DC U _{rms} 700V.AC U _s 3000V										
0.068	32	9	17	0.8	25	23	1500	102	6.9	STE6832000*32B**
0.1	32	11.5	19.5	1	18	22	1500	150	8.2	STE1042000*32B**
0.1	37	10.5	18.5	1	18	26	1450	145	8	STE1042000*37B**
0.22	32	17.5	25.5	1.2	15	21	1400	308	9.1	STE2242000*32C**
0.22	37	16	24	1.2	15	25	1300	286	9	STE2242000*37C**
0.33	37	20	28	1.2	12	24	1250	412.5	9.5	STE3342000*37C**
0.33	44	18	26	1.2	12	30	1200	396	10.2	STE3342000*44C**
0.47	44	19.5	32	1.2	10	29	1100	517	12.4	STE4742000*44C**
0.68	44	24	36.5	1.2	8	28	1000	680	14.2	STE6842000*44C**
0.68	57	18.5	31	1.2	8	27	900	612	14.2	STE6842000*57C**
1	57	23.5	36	1.2	6	31	950	950	14.5	STE1052000*57C**
1.5	57	29.5	42	1.2	5	31	850	1275	14.5	STE1552000*57C**
2	57	33	48.5	1.2	4.2	31	750	1500	16.5	STE2052000*57C**
2.2	57	35	50.5	1.2	4	30	700	1540	17.8	STE2252000*57C**
U _N 3000V.DC U _{rms} 750V.AC U _s 4500V										
0.047	44	13.5	21.5	1	22	20	2000	94	8.5	STE4733000*44B**
0.068	44	17	25	1	20	20	1800	122.4	10.5	STE4733000*44B**
0.1	44	20.5	28.5	1.2	18	20	1500	150	12.4	STE1043000*44C**
0.15	44	26	34	1.2	16	22	1350	202.5	13.8	STE1543000*44C**
0.22	44	29	41.5	1.2	14.5	22	1200	264	14.5	STE2243000*44C**



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GTO 缓冲吸收电容 SMJ-TC series

Snubber capacitor



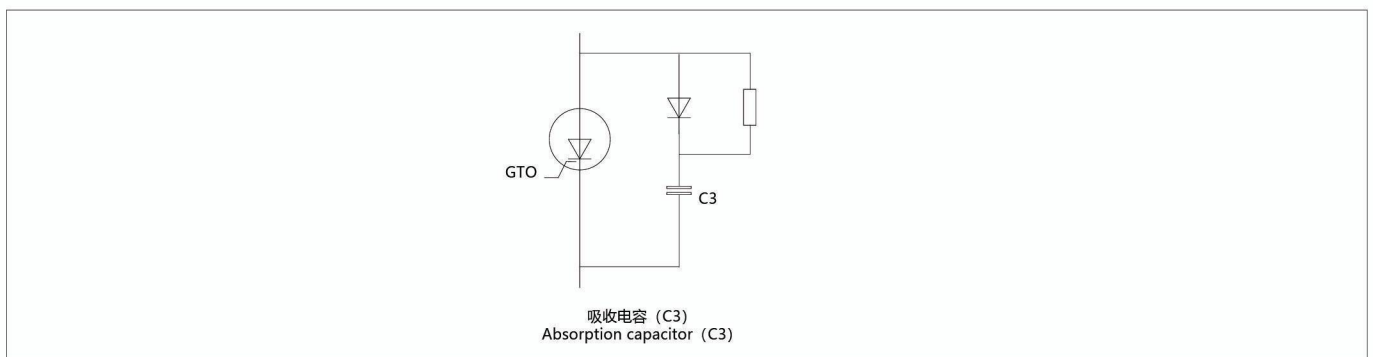
应用

- 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

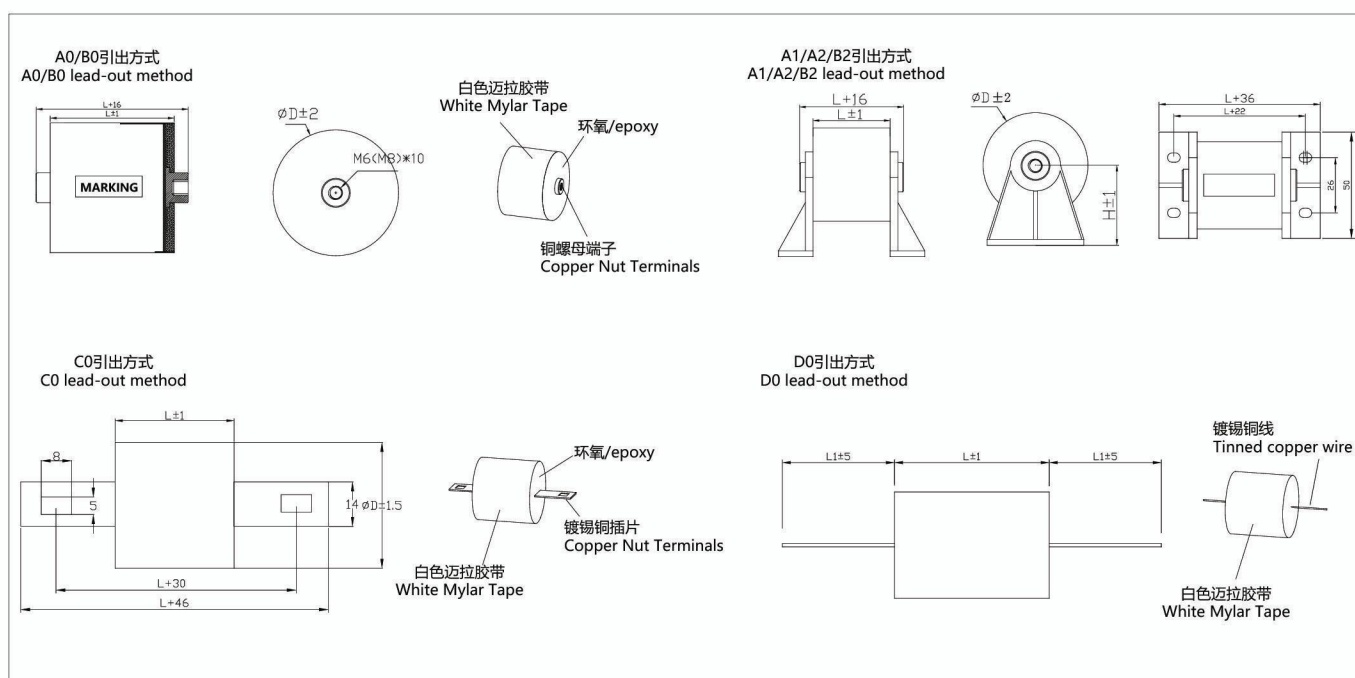
线路图 The circuit diagram



性能参数 Technical data

工作温度范围/Operating temperature range	Max.Operating temperature.Top,max:+85℃
	Upper category temperaturer:+85℃
	Lower category temperaturer:-40℃
容量范围 (C _N) /Capacitance range	0.22μF~3μF
额定电压 (U _N) /Rated voltage	3000V.DC~10000V.DC
容量偏差/Cap.tol	±5% (J) ; ±10% (K)
耐电压/Withstand voltage	1.35U _N /10s
损耗角正切/Dissipation factor	tgδ≤0.001 f=1kHz
绝缘电阻/Insulation resistance	C≤0.33μF R _s ≥15000MΩ (at 20℃ 100V.DC 60s)
	C>0.33μF R _s ×C≥5000s (at 20℃ 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 _N ; θ _{hotspot} ≤70℃)
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 _N (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=10×10⁵ pF=1μF

7 ~ 11 位: 额定电压 (直流) / U_N(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 (μF)	ϕD (mm)	L (mm)	ESL (nH)	dv/dt (V/ μS)	I_p (A)	I_{rms} (A)	Part number
$U_N = 3000V.DC$							
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****
$U_N = 6000V.DC$							
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****
$U_N = 7000V.DC$							
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****
$U_N = 8000V.DC$							
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****
$U_N = 10000V.DC$							
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****

