

Type SCMT Single/Dual IGBT Snubber Capacitor Modules

用途

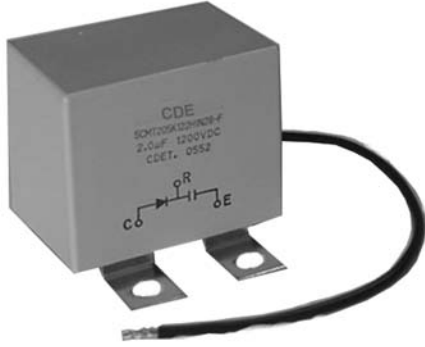
Applications

使用SCMT型目的就像是放电限制分离耦合，是保护双IGBT模块。

Use style SCMT as a discharge restrictive de-coupling to protect

dual IGBT modules from overvoltage, Figure 1. Style SCMT 如图1，SCMT型也是有“N”型或“P”型突波吸收电容，各对一个IGBT。 may also be used as an “N” or “P” type snubber component for a

clamp snubber where single IGBT modules are used, Figure 2.



特点

Highlights

- 可直接安装在IGBT上
- Mount directly to the IGBT module
- 低电感
- Low inductance
- 低损耗
- Low Loss
- 内装快恢复管
- Hyperfast diodes integrated into package
- 一条或者两条引线可连接到电阻上
- 1 or 2 wire taps for connecting external resistor
- UL94V0阻燃环氧树脂封装
- Flame resistant case and epoxy, meets UL 94V0
- 各种间距的电容器可供选择
- Other terminal pitches and capacitance values available.
- 使用环保材料
- **RoHS Compliant**

放电限制分离耦合

Discharge Restrictive De-coupling

在图1中的线路中操作上与放电限制分离耦合一样，
The circuit in Figure 1 operates on the same

principles as the de-coupling capacitor, but only 但只有在关闭转换时，
during turn-off switching. As the IGBT turns

off, energy trapped in the loop inductance is 当IGBT关的时候，感性线圈中的能量被转移到电容上。
transferred to the capacitor. The diode blocks

oscillations from occurring and excess charge on 从充电到充电过于饱和，通过电容内部电阻，二极管阻止了振荡。
the capacitor is discharged through the external

resistor.

RCD吸收回路

RCD Clamp

这种突波吸收功能就像一个夹子，如图2，在关闭时，
The function of this snubber is similar to a clamp,

Figure 2. At turn-off, the snubber diode is forward 于是就产生了突波吸收的作用。感性线圈中产生的能量
biased and the snubber is activated. The energy

trapped in the stray inductance is absorbed by the 被突波吸收电容吸收了。当打开时，突波吸收电容
snubber capacitor. During turn-on the snubber

caps that were fully charged to bus voltage have 通过母线电压充至饱和，放电回路二极管的正向偏置，
a discharge path through the forward biased

free-wheel diode, the IGBT, and the snubber IGBT，突波吸收电容电阻。这样会减少反向瞬间电压。
resistors. This reduces the reverse recovery voltage

transient.

Type SCMT Single/Dual IGBT Snubber Capacitor Mod-

使用环保材料

RoHS Compliant

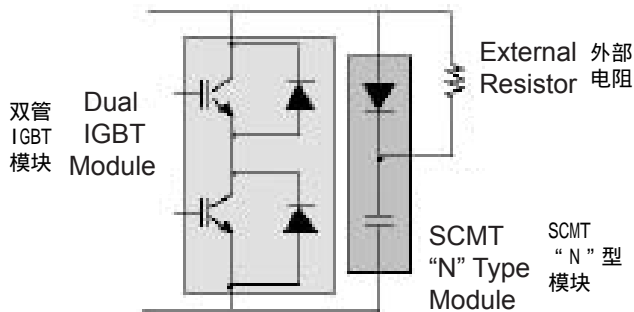
放电限制分离耦合

Discharge Restrictive De-coupling

图1 SCMT型放电限制分离耦合保护双管IGBT模块

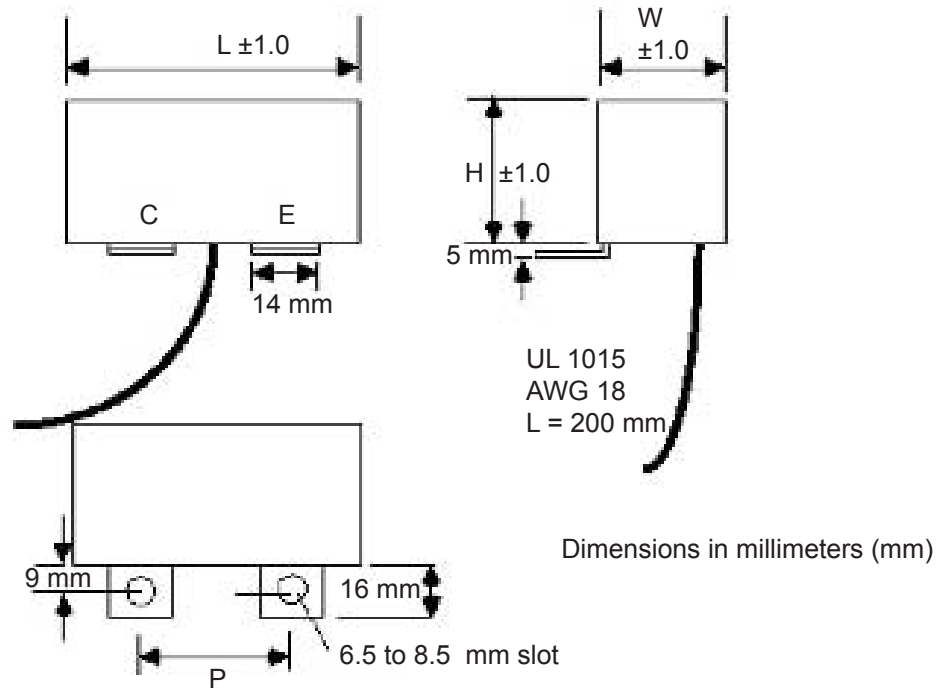
Figure 1

Style SCMT Discharge restrictive decoupling used to protect dual IGBT modules



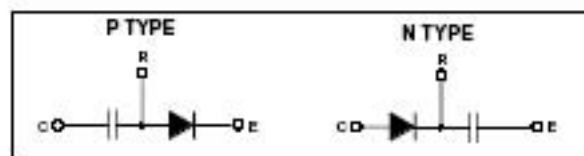
略图

Outline Drawing



P 型, N型吸收模块的电路

N and P Type Circuits



Type SCMT Single/Dual IGBT Snubber Capacitor Modules

种类 使用环保材料
Ratings **RoHS Compliant**

目录型号 Catalog Part Number	电容量 Cap (μ F)	典型 IGBT 吸收模块的应用 Typical Application IGBT Module			二极管的特性 Diode Characteristics							尺寸 Dimensions						
		S 单管 S=Single	集电极 电流 Ic (A)	最大阻 隔电压 Vce (V)	类型 Type	反向 重复 峰值 电压 Vrrm (V)	最大 正向 平均 电流 If (A)	反向 恢复 时间 Trr (μ s)	峰值 电流 Ipk surge (A)	典型 电流 Ipk Rep. (A)	宽 W		长度 L		高 H		孔距 P	
											(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
		D 双管 D=Dual	(A)	(V)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)				
SCMT474K601H7N28-F	.47	S	200-300	600	N	600	30	0.050	300	70	0.91	23.0	2.3	58.0	1.38	35.0	1.10	28.0
SCMT474K601H7P28-F	.47	S	200-300	600	P	600	30	0.050	300	70	0.91	23.0	2.3	58.0	1.38	35.0	1.10	28.0
SCMT474K601H7[*]25-F	.47	D	200-300	600	[*]	600	30	0.050	300	70	0.91	23.0	2.3	58.0	1.38	35.0	0.98	25.0
SCMT105K601H5N29-F	1.00	S	300-400	600	N	600	50	0.050	500	100	0.91	23.0	2.3	58.0	1.38	35.0	1.14	29.0
SCMT105K601H5P29-F	1.00	S	300-400	600	P	600	50	0.050	500	100	0.91	23.0	2.3	58.0	1.38	35.0	1.14	29.0
SCMT105K601H5[*]25-F	1.00	D	300-400	600	[*]	600	50	0.050	500	100	0.91	23.0	2.3	58.0	1.38	35.0	0.98	25.0
SCMT155K601H7N28-F	1.50	S	200-300	600	N	600	30	0.050	300	70	0.91	23.0	2.3	58.0	1.38	35.0	1.10	28.0
SCMT155K601H7P28-F	1.50	S	200-300	600	P	600	30	0.050	300	70	0.91	23.0	2.3	58.0	1.38	35.0	1.10	28.0
SCMT155K601H7[*]25-F	1.50	D	200-300	600	[*]	600	30	0.050	300	70	0.91	23.0	2.3	58.0	1.38	35.0	0.98	25.0
SCMT205K601H2N29-F	2.00	S	400-600	600	N	600	100	0.050	1000	200	0.91	23.0	2.3	58.0	1.38	35.0	1.14	29.0
SCMT205K601H2P29-F	2.00	S	400-600	600	P	600	100	0.050	1000	200	0.91	23.0	2.3	58.0	1.38	35.0	1.14	29.0
SCMT205K601H2[*]25-F	2.00	D	400-600	600	[*]	600	100	0.050	1000	200	0.91	23.0	2.3	58.0	1.38	35.0	0.98	25.0
SCMT154K122H8N28-F	.15	S	200-300	1200	N	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	1.10	28.0
SCMT154K122H8P28-F	.15	S	200-300	1200	P	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	1.10	28.0
SCMT154K122H8[*]25-F	.15	D	200-300	1200	[*]	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	0.98	25.0
SCMT224K122H8N29-F	.22	S	200-300	1200	N	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	1.14	29.0
SCMT224K122H8P29-F	.22	S	200-300	1200	P	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	1.14	29.0
SCMT224K122H8[*]25-F	.22	D	200-300	1200	[*]	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	0.98	25.0
SCMT334K122H8N28-F	.33	S	200-300	1200	P	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	1.10	28.0
SCMT334K122H8P28-F	.33	S	200-300	1200	N	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	1.10	28.0
SCMT334K122H8[*]25-F	.33	D	200-300	1200	[*]	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	0.98	25.0
SCMT474K122H8N29-F	.47	S	200-300	1200	N	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	1.14	29.0
SCMT474K122H8P29-F	.47	S	200-300	1200	P	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	1.14	29.0
SCMT474K122H8[*]25-F	.47	D	200-300	1200	P	1200	30	0.085	300	60	0.91	23.0	2.3	58.0	1.38	35.0	0.98	25.0
SCMT105K122H4N28-F	1.00	S	300-400	1200	N	1200	50	0.1	500	100	1.38	35.0	2.3	59.0	1.77	45.0	1.10	28.0
SCMT105K122H4P28-F	1.00	S	300-400	1200	P	1200	50	0.1	500	100	1.38	35.0	2.3	59.0	1.77	45.0	1.10	28.0
SCMT105K122H4[*]25-F	1.00	D	300-400	1200	[*]	1200	50	0.1	500	100	1.38	35.0	2.3	59.0	1.77	45.0	0.98	25.0
SCMT205K122H1N29-F	2.00	S	400-600	1200	N	1200	100	0.1	1000	200	1.54	39.0	2.3	59.0	1.85	47.0	1.14	29.0
SCMT205K122H1P29-F	2.00	S	400-600	1200	P	1200	100	0.1	1000	200	1.54	39.0	2.3	59.0	1.85	47.0	1.14	29.0
SCMT205K122H1[*]25-F	2.00	D	400-600	1200	[*]	1200	100	0.1	1000	200	1.54	39.0	2.3	59.0	1.85	47.0	0.98	25.0

Ipk surge at 25 °C and Ipk repetitive at 25 °C and 20 kHz. [*] Specify "N" or "P" Type
 型号体系

Part Numbering System

