

客 戶 名 稱:

CUSTOMER

產 品 名 稱:

ITEM

AC交流滤波薄膜电容器

產 品 類 型

CUSTOMER'S PART NO.

金属化聚丙烯盒式交流输出滤波电容器(PCB)

產 品 規 格

CUSTOMER'S P/N:

AC filtering 1.5uF ±10% 450VAC 82CB0353

日 期

ISSUED DATE

2023/4/8

## 承认印 (APPROVAL STAMP)

供应商 (VENDER)

客户 (CUSTOMER)

◆ 如果您有特殊要求请联系我们, 我们将提供符合您要求的产品。

◆ If your requirement is special please contact us, we will test products as per your requirement.

版次

日期

变更内容

东莞市科尼盛电子有限公司

发文部门: 工程部

编号: KNS-GCAPB

交流输出滤波电容器

A.C.output filter capacitors for PCB

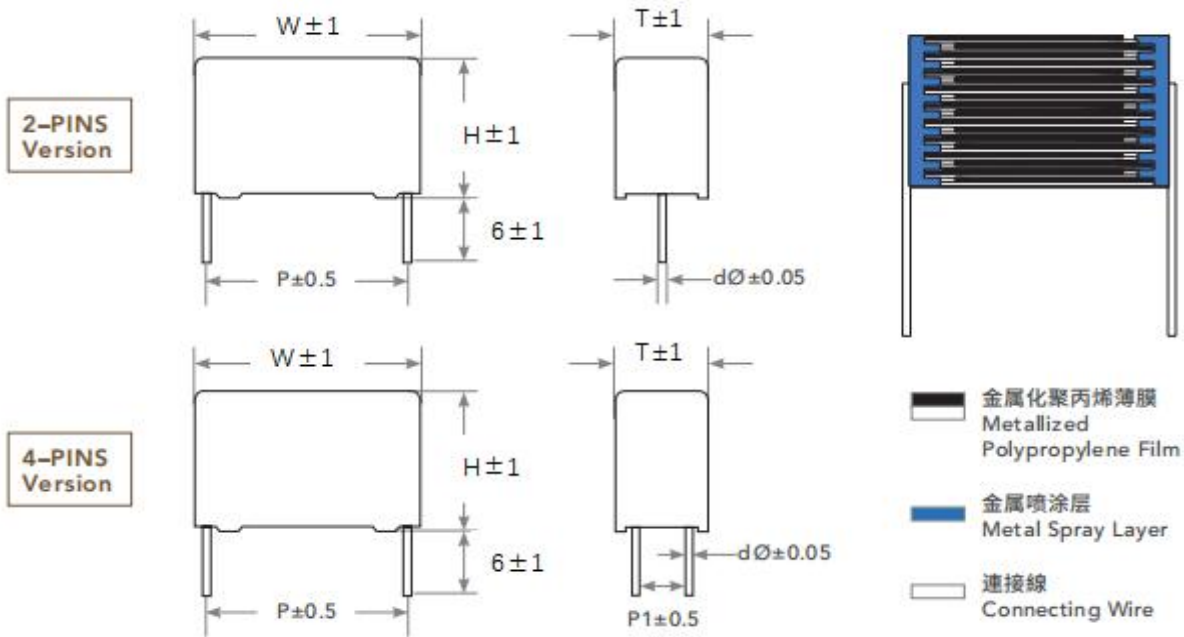
拟制: 薛子文

制定日期: 2023/4/10

审核: 任正非

版 本: V1.0

**外形及结构图**



**结构 Construction:**

电介质: 金属化聚丙烯薄膜  
 Dielectric: Metallized Polypropylene Film  
 绕卷: 低感式  
 Winding: Low inductive type  
 导线: 镀锡线  
 Leads: Tinned Wire  
 外层: 阻燃塑胶外壳, 环氧树脂填充  
 Outer Coating: Flame retarding plastic case and epoxy filled

**特点 Feature:**

高电容密度  
 High Capacitance Density  
 高纹波电流  
 High Ripple Current  
 良好的自愈性  
 Self-healing properties

**推荐应用 Recommended Application:**

适用于小功率交流输出滤波电路, 如 UPS, 太阳能光伏 DC/AC 逆变器中的 LCL 滤波  
 Suitable for low-power AC output filtering circuit, such as UPS, solar photovoltaic DC/AC inverter LCL filtering

**电气特性 Electrical Characteristics:**

引用标准	GB/T 17702 (IEC 61071)
<b>Related Documents</b>	

额定均方根电压 <b>Rated root mean square voltage (Urms)</b>	180Vac	250Vac	300Vac	350Vac
额定交流电压 <b>Rated ac voltage(U<sub>N</sub>)</b>	250Vac	350Vac	425Vac	480Vac
最大连续直流电压 <b>Maximum continuous DC voltage</b>	300Vdc	475Vdc	560Vdc	600Vdc
气候类别 <b>Climatic category</b>	40/85/56			
最高工作温度(外壳温度) <b>Maximum operating temperature (Case)</b>	-40℃ ~ +105℃ 85℃ (+85℃ to +105℃: decreasing factor 1.5% per °C for Urms)			
容量误差 <b>Capacitance Tolerance</b>	±5% (J), ±10% (K)			
绝缘电阻(IR×CN) <b>Insulation Resistance</b>	≥3000S (20℃ 100Vdc 1min)			
耐电压 <b>Voltage Proof</b>	引线之间 <b>Between Terminals:</b>	1.5Un(Vac) (10s)		
	极壳之间 <b>Between Terminals to Case:</b>	3000Vac (60s)		
损耗角正切 <b>Dissipations Factor</b>	≤20 10 <sup>-4</sup> (1kHz,20℃) (Typical value,15×10 <sup>-4</sup> )			
注：若用于户外或长期湿度较大场合，建议选用防潮设计。				

**Urms=180VAC U<sub>N</sub>=300VAC U<sub>NDC</sub>=475VDC**

Cap (uF)	Dimensions(mm)			P ± 0.5	P1 ± 0.5	d ± 0.05	dV/dt (V/us)	Ls (nH)	ESR 10KHz mΩ	Irms 10KHz 70°C A	I Peak Current (A)	料号 Part Number
	W	H	T									
4.7	32	37	22	27.5	--	1.2	40	26	5.2	9	200	82CB0354
10	41.5	38	25	37.5	--	1.2	30	30	5.6	12	300	82CB0358
20	57.5	45	30	52.5	20.3	1.2	25	35	6.0	14	500	82CB0359
60	57.5	56	42.5	52.5	20.3	1.2	25	30	3.2	27	1200	82CB0361

**Urms=250VAC U<sub>N</sub>=350VAC U<sub>NDC</sub>=560VDC**

Cap (uF)	Dimensions(mm)			P ± 0.5	P1 ± 0.5	d ± 0.05	dV/dt (V/us)	Ls (nH)	ESR 10KHz mΩ	Irms 10KHz 70°C A	I Peak Current (A)	料号 Part Number
	W	H	T									
4.0	32	37	22	27.5	--	1.2	40	26	5.9	9	160	82CB0357
4.7	32	37	22	27.5	--	1.2	40	26	5.2	9	200	82CB0355
8.0	41.5	41	27.5	37.5	--	1.2	30	30	5.2	11	290	82CB0352
15	41.5	45	30	37.5	--	1.2	30	30	5.0	12	450	82CB0362
20	57.5	50	35	52.5	20.3	1.2	28	35	6.0	14	560	82CB0360

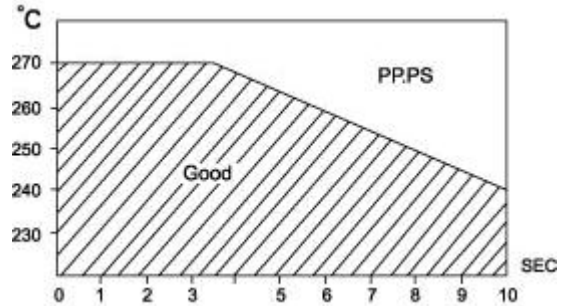
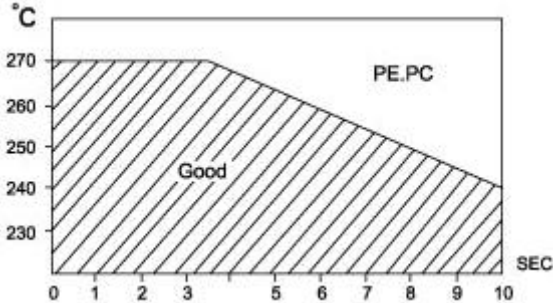
**Urms=350VAC U<sub>N</sub>=450VAC U<sub>NDC</sub>=600VDC**

Cap (uF)	Dimensions(mm)			P ± 0.5	P1 ± 0.5	d ± 0.05	dV/dt (V/us)	Ls (nH)	ESR 10KHz mΩ	Irms 10KHz 70°C A	I Peak Current (A)	料号 Part Number
	W	H	T									
1.5	31	25	14	27.5	--	1.0	55	28	7.3	8	82.5	82CB0353
4.7	42.5	37	22	37.5	--	1.2	30	30	6.0	12	450	82CB0356

## 薄膜电容性能参数 Electrical Characteristics of Film Capacitor

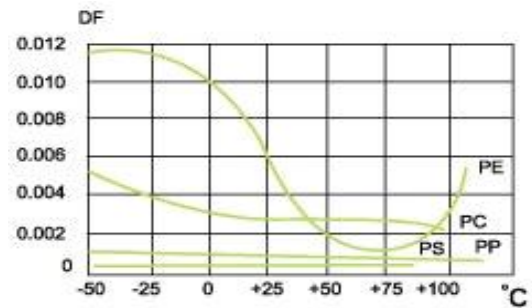
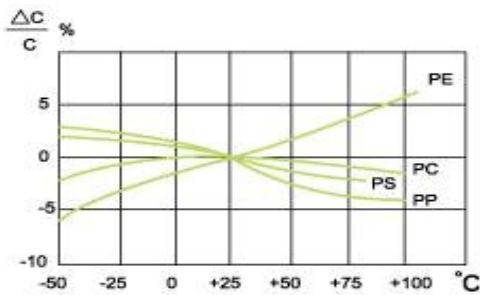
### 1. 焊接温度与时间对比

#### Soldering Temperature VS Time



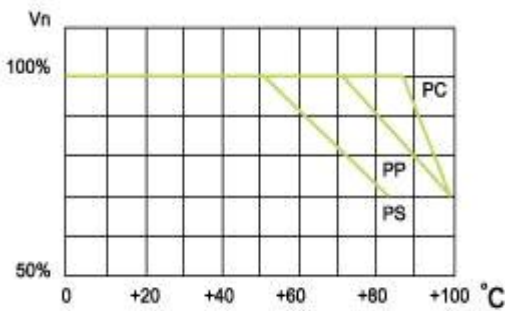
### 2. 温度性能

#### Temperature Characteristic



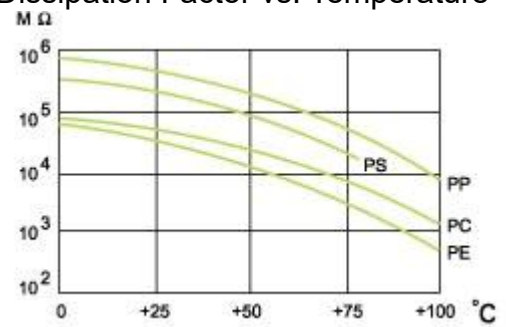
容量变化率与温度的关系

#### Capacitance vs. Temperature



损耗角正切与温度的关系

#### Dissipation Factor vs. Temperature



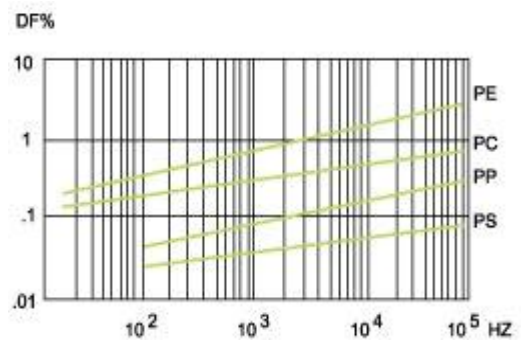
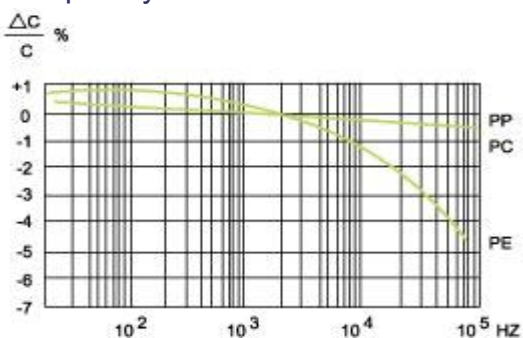
使用电压与温度的关系

#### Operation voltage vs. Temperature

#### (CR value) IR vs. Temperature

### 3. 频率性能

#### Frequency Characteristics



容量变化率与频率的关系

损耗角正切与频率的关系

#### Capacitance vs. Frequency

#### Dissipation Factor vs. Frequency