

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 10uF ±5% 300VAC 82CB0358

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

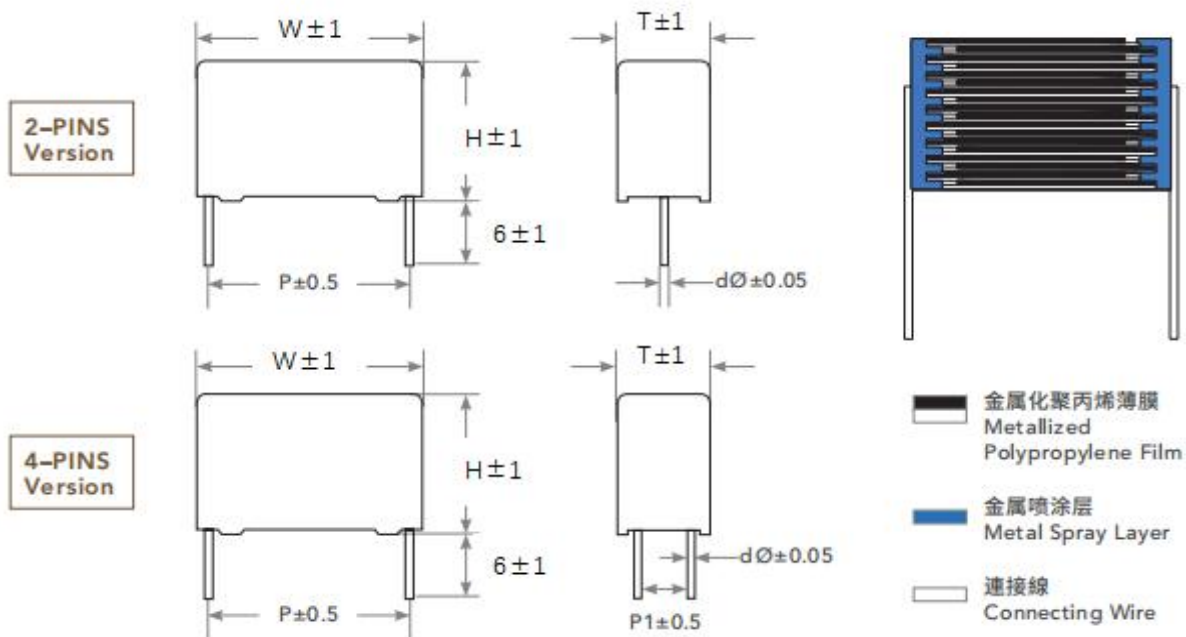
拟制: 薛子文

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

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

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

电气特性 Electrical Characteristics:

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

额定均方根电压 Rated root mean square voltage (Urms)	180Vac	250Vac	300Vac	350Vac
额定交流电压 Rated ac voltage(U _N)	250Vac	350Vac	425Vac	480Vac
最大连续直流电压 Maximum continuous DC voltage	300Vdc	475Vdc	560Vdc	600Vdc
气候类别 Climatic category	40/85/56			
最高工作温度(外壳温度) Maximum operating temperature (Case)	-40℃ ~ +105℃ 85℃（+85℃ to +105℃: decreasing factor 1.5% per ℃ for Urms）			
容量误差 Capacitance Tolerance	±5% (J), ±10% (K)			
绝缘电阻(IR×CN) Insulation Resistance	≥3000S （20℃ 100Vdc 1min）			
耐电压 Voltage Proof	引线之间 Between Terminals:		1.5Un(Vac) (10s)	
	极壳之间 Between Terminals to Case:		3000Vac (60s)	
损耗角正切 Dissipations Factor	≤20 10 ⁻⁴ (1kHz,20℃) （Typical value,15×10 ⁻⁴ ）			
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_N=300VAC U_{NDC}=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℃ 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_N=350VAC U_{NDC}=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℃ 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

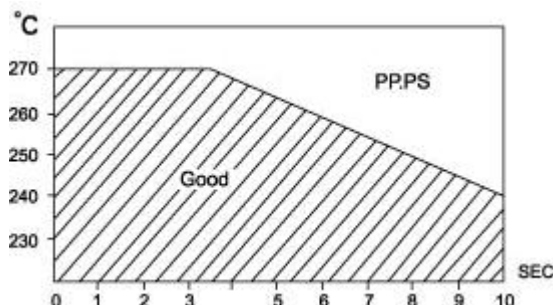
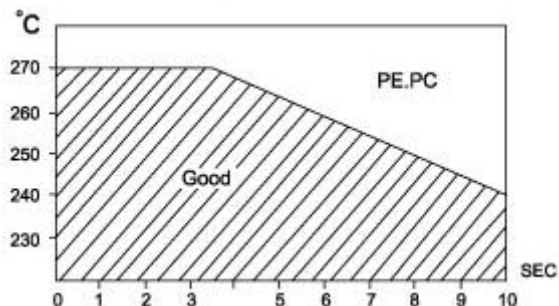
Urms=350VAC U_N=450VAC U_{NDC}=600VDC

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℃ A	I Peak Current (A)	料号 Part Number
	W	H	T									
1.5	32	37	22	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

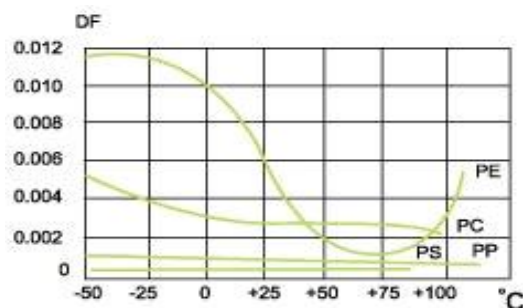
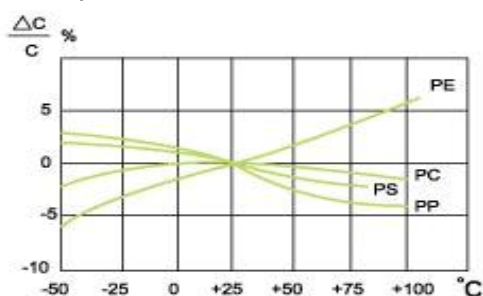
1. 焊接温度与时间对比

Soldering Temperature VS Time



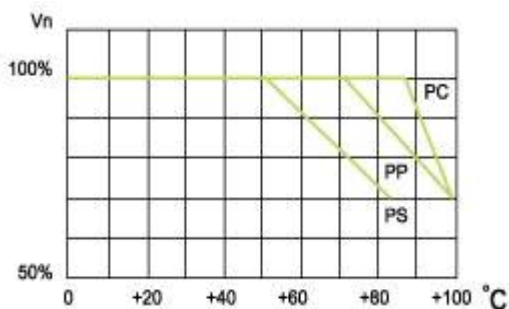
2. 温度性能

Temperature Characteristic



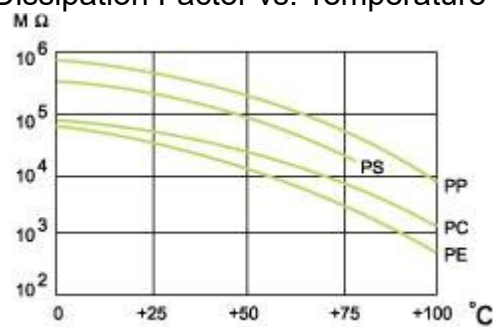
容量变化率与温度的关系

Capacitance vs. Temperature



损耗角正切与温度的关系

Dissipation Factor vs. Temperature

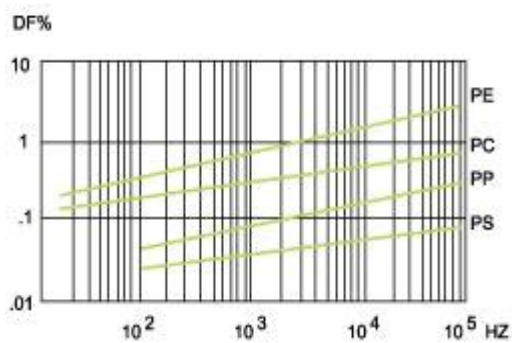
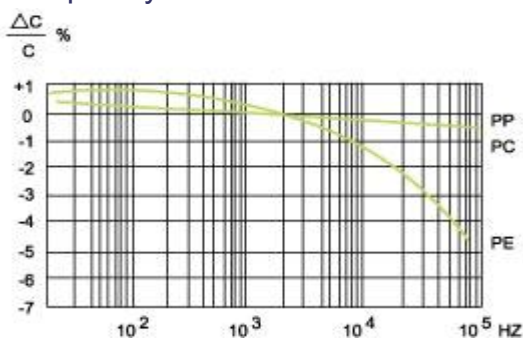


使用电压与温度的关系

Operation voltage vs. Temperature

3. 频率性能

Frequency Characteristics



容量变化率与频率的关系

Capacitance vs. Frequency

损耗角正切与频率的关系

Dissipation Factor vs. Frequency