

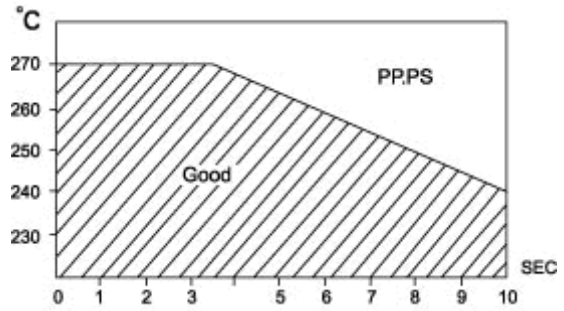
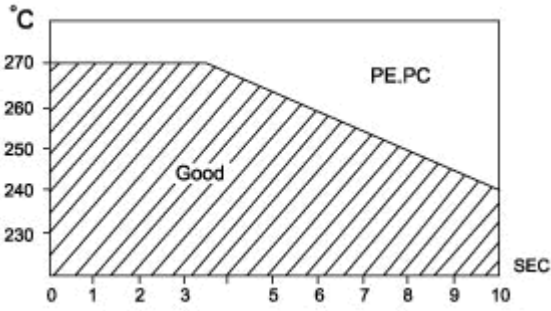


Specifications 规范										
Item 项次	Part NO. 料号	Cap 容量(UF)	公差	V <sub>R</sub> (VAC)	Dimension(尺寸)mm					
					W	H	T	P	L	D
1	X2104K2FAE70AAH/ZDIN	0.1	±10%	330	18	12	6	15	15	0.8
2										
3										
4										
Item 项次	Name 品名	Description 内容	MARK 印字					COLOR: GREY		
1	Film	Metallized Polypropylene film						COLOR: GREY		
2	Wire	Φ0.8mmCP wire								
3	Epoxy	(Compliance with UL94V-0 )Flame-retardant epoxy resin.								
4	Case	(Compliance with UL 94V-0 ) Flame-retardant plastic case.								
Operating temperature rang 使用温度范围		Max. operating temperature T <sub>op,max</sub> 最高使用温度						+110℃		
		Lower category temperature T <sub>min</sub> 下限温度						-40℃		
Operating AC voltage V <sub>op</sub> at high temperature 高温交流电压		T <sub>A</sub> ≤100		V <sub>OP</sub> =1.0 · V <sub>AC</sub> (continuously)						
		T <sub>A</sub> ≤100		V <sub>OP</sub> =1.25 · V <sub>AC</sub> (1000 h)						
Dissipation factor tan δ 损耗角正切 tan δ		DF≤0.001 (Temperature at 20 ± 1 °C; Frequency at 1±0.1KHZ; Voltage at rmsl ±0.1V)								
Insulation resistance R <sub>ins</sub> or time constant τ=C <sub>R</sub> · R <sub>ins</sub> at ,RH≤65% 20℃绝缘电阻或时间常数		C <sub>R</sub> ≤0.33uF			C <sub>R</sub> >0.33uF			充电电压 100VAC		
		15000M Ω			5000 M Ω · uf			充电时间 60S		
Passive flammability category to IEC 40 (CO) 752		B								
DC test voltage 直流测试电压		4.3 *V <sub>R</sub> (DC) 60 S								
Life test 寿命试验		1000h/110℃/VR · 1.25 每小时将电压升至 1000VAC/60HZ,时间为 0.1 秒, 每一电容加一 47 Ω 的电阻								
Limit values after damp heat test 试验后限值		Capacitance change 容量变化   ΔC/C			≤10%					
		Dissipation factor change Δtan δ 损耗角正切变化Δtan δ			≤5 · 10 <sup>-3</sup> (at 1kHz)					
		Insulation resistance R <sub>ins</sub> 绝缘电阻			≥50% of minimum					
		or time constant τ = C <sub>R</sub> · R <sub>ins</sub> 或时间常数			as-delivered values					
Failure rate λ 失效率		1 fit(≤1. 10 <sup>-9</sup> /h)at 0.5 · V <sub>R</sub> ,40℃								
Service life t <sub>SL</sub> 使用寿命		>30000h at 1.0 · V <sub>R</sub> · T <sub>A</sub> ≤85℃								
Total failure 完全失效		open circuit 开路								
failure due to 故障原因		Capacitance change 容量变化   ΔC/C			>10%					
variation 的变化参数		Dissipation factor tan δ 损耗角正切 tan δ			>2. upper limit value 上限值					
		Insulation resistance R <sub>ins</sub> 绝缘电阻			<150 M Ω (C <sub>R</sub> ≤0. 33 uF)					
		or time constant τ =C <sub>R</sub> · R <sub>ins</sub> 时间常数			<50S (C <sub>R</sub> ≤0. 33 uF)					
客户 承认	核准	审核	确认	DIN	核准	审核	承办	日期	设计编号	
							Zhang	2022-10-14		

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

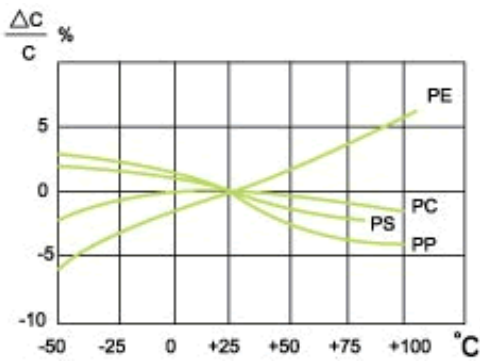
## 1. 焊接温度与时间对比

### Soldering Temperature VS Time



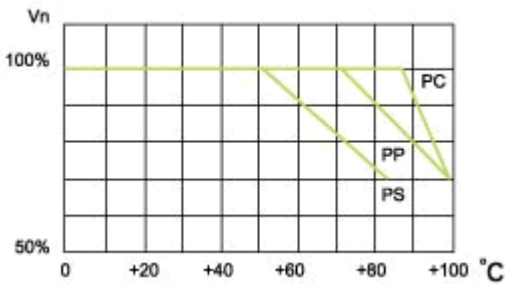
## 2. 温度性能

### Temperature Characteristic



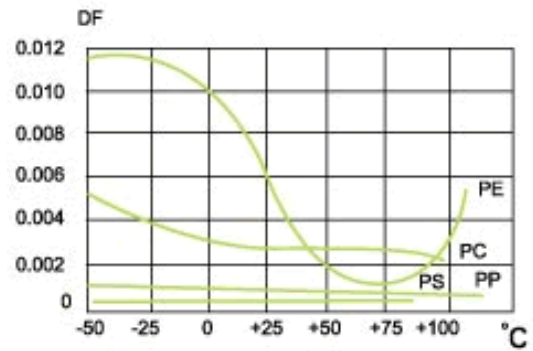
容量变化率与温度的关系

### Capacitance vs. Temperature



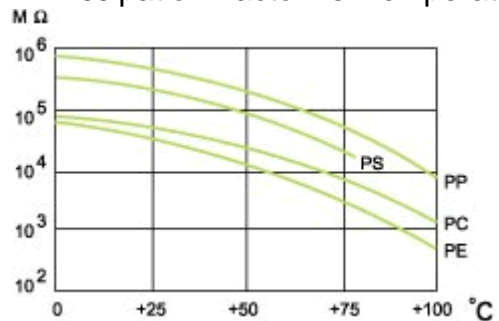
使用电压与温度的关系

### Operation voltage vs. Temperature



损耗角正切与温度的关系

### Dissipation Factor vs. Temperature

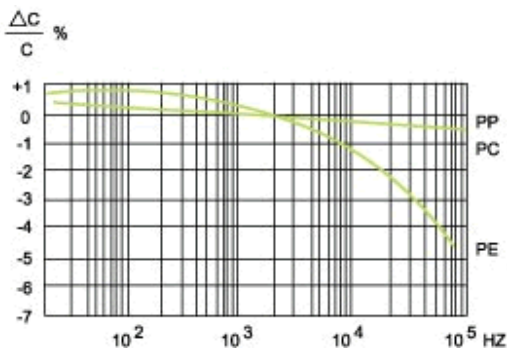


绝缘电阻与温度的关系

### (CR value) IR vs. Temperature

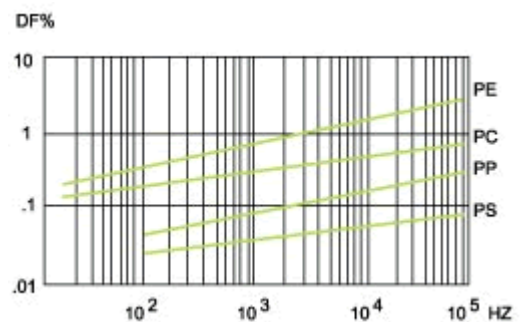
## 3. 频率性能

### 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