

东莞市科雅电子科技有限公司

规格书

PROUCT APPROVAL SHEET

客户名称: 立创商城

Customer

品 名: 径向引线独石电容器

Product Name Radial Leaded Mlcc

规 格: CT40805B104K500F3 104K50V P=5

Product Spec

版 本 号: V3.1

Version Number

日 期: 2024/06/22

Date



客 户 Customer			制 造 Manufacturer		
确 认 Approval			确 认 Approval		
检验 Inspector	审核 Checker	批准 Approver	拟制 Designer	审核 Checker	批准 Approver
			周潇潇	文海峰	刘大鹏

东莞市科雅电子科技有限公司

客户名称 Customer		客户编号 Customer number		日期 Date	2024/06/22
规格型号 Product Name	CT4-0805B104K500F3		生产编号 Lot No		

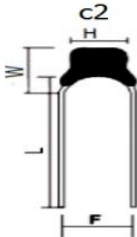
电性参数 Electrical parameters

规格型号 Product Name	容量范围 Capacitance	损耗 DF	绝缘电阻 IR	耐压范围 Breakdown Voltage	判定 Result
CT4-0805B104K500F3	90~110nF	≤3.5%	≥1×10 ⁹ Ω	50V×2.5 倍	OK

订货代码 Ordering Code

A	产品类别 Product Type				B	本体外形尺寸规格（长×宽） Nominal Body Size（Length×Width±0.05）	
	CT4	CT4 II 类径向引线独石电容器 CT4 Class II radial lead monolithic capacitors				0805	2.00×1.25mm
C	温度特性 Temperature Characteristic				D	标称容量 Nominal Capacitance C	
	B	X7R	±15%	-55~+125℃		104	0.1uF
E	容量偏差 Tolerance				F	额定电压 Rated Voltage	
	K	±10%				500	50V
G	包装方式 Packaging Style				H	脚距（单位：mm） Lead Space（Unit：mm）	
	Blank	散包装 1000PCS/包 Bulk 1000PCS/BAG				F3	5.08mm
I	引线材质 Wire material		规格 Specifications		线 径 Wire diameter		导电率 Line conductivity
			镀锡铜包钢线 Tin plated copper clad steel wire		Φ0.45~0.5mm		16.6~18%
			镀锡铜线 Tin plated copper wire				

尺寸、工作电压及容量关系表 Size Code and Voltage VS Capacitance

尺寸规格 Size Code	外形 Shape	尺寸（单位：mm） Dimensions（Unit：mm）					工作电压 Voltage
		F±0.5 （脚距）	L±2 （脚长）	H（宽） MAX	W（高） MAX	T（厚） MAX	
0805		5.08		6.0	6.5	4.0	≤50V

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通用型引线MLCC可靠性及测试方法

Reliability and Test Method for General Leaded MLCC

项目 Item	技术要求 Technical Specification			测试方法和备注 Test methods and remarks.		
容量 Capacitance (C)	I 类 Class I	应符合指的误差级别 With in the specified tolerance.		标称容量 Capacitance	测试频率 Measuring Frequency	测试电压 Measuring Voltage
				<1000pF	1MHZ±10%	1.0V
				≥1000pF	1KHZ±10%	
	II 类 Class II	应符合指的误差级别 Wit hi n the specified tolerance.		对于 II 类电容器，测试前应先预处理 For class II capacitor, pr e treatment should be taken before the test		
				测试频率 Measuring Frequency	测试电压 Measuring voltage	
				<10 μ F 1KHZ±10% ≥10 μ F120Hz±10%	B: 1.0V	E/Y(F) <1uF/0.5V ≥1uF/1.0V
损耗角正切 Dissipation Factor (DF)	I 类 Class I	C, R≥50pF DF≤0.15% C, R<50pF DF≤1.5【(150/C, R)+7】×10-4		标称容量 Capacitance	测试频率 Measuring Frequency	测试电压 Measuring Voltage
				≤1000pF	1MHZ±10%	1.0V
				>1000pF	1KHZ±10%	
	II 类 Class II	B	100V<1 μ F DF≤3.5% 50V≥1 μ F , DF≤5.5% 25V≥10 μ F , DF≤7.5% 16V≥10 μ F , DF≤10% 10V≥10 μ F , DF≤15%	≤10uF 测试频率:1KHZ±10%; 测试电压: 1.0V ≥10uF 测试频率:120Hz±10%;测试电压: 1.0V Measuring Frequency Measuring voltage		
		E/ Y (F)	(C,R≤0.1 μ F≤7.5%) (C,R≥1 μ F≤10.0%) (≥10 μ F , DF≤15%)	测试频率 Measuring Frequency 测试电压: 0.5V Measuring voltage		
			(≥1 μ F C, R≥0.1 μ F) ≤15%(C,R≥1 μ F) 0402/C, R≥ 0.1 μ F ≤15%	测试频率 Measuring Frequency 测试电压: 1.0V Measuring voltage		
绝缘电阻 Insulation Resistance	I 类 Class I	C≤10nF IR≥10000MΩ		测试电压:额定电压 Measuring voltage: Rated voltage 测试时间: 60±5 秒 Du ration: 60±5S		
	II 类 Class II	C≤25nF IR≥4000MΩ C>25nF R.C÷100s Ω F				

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项目 Item	技术要求 Technical Specification	测试方法和备注 Test Method and Remarks
耐电压 Withstand voltage	不应有介质被击穿或损伤 Should not have the breakdown or damage	端之间 Between terminals 测试电压 Measuring Voltage: 持续时间: 5±1 秒 Duration: 5±1s I 类: 300%额定电压 Class I: 300% Rated voltage II 类: $U_R \leq 500V$ 额定电压 $2.5U_R$ Class II: $U_R \leq 500$ v rated voltage 500 v or less II 类: $U_R > 500V \leq 1000V$ 额定电压 $1.5U_R$ Class II: $U_R > 1.5$ UR 500 v rated voltage 1000 v or less II 类: $U_R > 1000V$ 额定电压 $1.2U_R$ Class II: $U_R > 1.2$ UR rated voltage 1000 v I 类充/放电电流不应超过 50mA I kind of charge/discharge current should not exceed 50 ma II 类小尺寸芯片充/放电电流不应超过 30mA Class II small size chips charge/discharge current should not exceed 30 ma II 类充/放电电流不应超过 50mA Class II charge/discharge current should not exceed 50 ma
		端子与外装间 Between terminals and body: 施加电压: $2.5U_R$ 持续时间: 1~5s Voltage: 2.5 times rated voltage Duration: 1~5s 金属制小球法 Metal ball method 将电容器本体插入盛满直径为 1mm 的金属小球的容器中, 但保留距端头处 2mm 的本体不插入。试验电压施加在短路回路端子和金属小球之间。 Insert the capacitor body filled with a diameter of 1 mm metal ball in the container, but keep away from the end of 2 mm ontology is not inserted. Test voltage applied between the short circuit loop terminal and a metal ball.
可焊性 Solderability	上锡率应大于 75% The tin rate should be greater than 75%	将电容器引线浸入含有 25%松香的酒精溶液中, 然后浸入温度为: $230 \pm 5^\circ C$ 的金属焊锡 (Sn) 中 2 ± 0.5 秒, 注意: 电容器本体底面距离锡面约 1.5~2mm。 Capacitor lead into the alcohol solution containing 25% rosin, then immersed temperature: $230 \pm 5^\circ C$ metal solder (Sn) 2 ± 0.5 seconds, note: capacitor body bottom tin surface distance is about 1.5 ~ 2 mm.
耐焊接热 Resistance to Soldering Heat	项目 Item	$\Delta C/C \leq$
	Class I	$\pm 2.5\%$ or $\pm 0.25pF$
	B	$\pm 10\%$
	E/Y(F)	$\pm 20\%$
	外观无可见损伤 No visible damage	
锡温: $260 \pm 5^\circ C$ Solder temperature: $260 \pm 5^\circ C$ 时间: 10 ± 1 s Duration: 10 ± 1 s 浸入条件: 将电容器插入厚度为 1.6mm, 孔径为 1.0mm 的 PC 板。 Immersion conditions: insert the capacitor thickness of 1.6 mm, pore size of 1.0 mm PC board. 对于 I 类介质, 试验后, 应在标准条件下恢复 4~24 小时才测试。 In class I medium, after the test, should be in the standard recovery under the condition of 4 ~ 24 hours to test. 对于 II 类介质, 在试验前应先行进行如下预处理: $150 (-10, +0)$, 1 小时。 接着在标准条件下恢复 48 ± 4 小时。 For class II medium, should undertake the following first pre treatment before test: the $150 (-10 + 0)$, 1 hour, Then under the condition of standard to restore 48 ± 4 hours. 恢复: 对于 II 类介质试验后, 应在标准条件下恢复 48 ± 4 小时后才测试。 Recovery: for class II medium after test, should be under standard conditions to restore 48 ± 4 hours after the test.		

若测试结果有争议时, 仲裁试验用标准大气条件为:

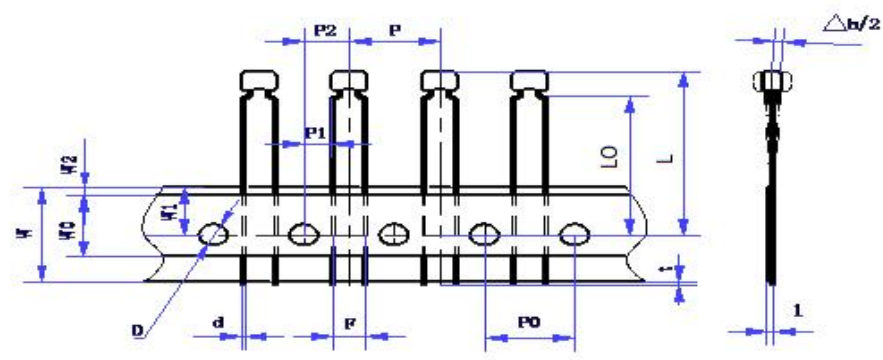
温度: $25 \pm 2^\circ C$, 相对湿度: $\leq 65\%$, 气压: 86~106kPa

If in case of any dispute over the test results, the arbitration in standard atmospheric conditions for test: Temperature: $25 + 2^\circ C$, relative humidity: $\leq 65\%$, atmospheric pressure: 86 ~ 106 kpa

包装形式

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Packaging Style



代号 Code	P	P0	P1	P2	d	Δh	W	W0	W1	W2	L	LO	D	t
尺寸 Dim	12.7	12.7	3.85	6.35	0.5	0	18.5	8	9	1.5	26	15~20	4.0	0.7
			5.1											
误差 Tol.	±0.2	±0.2	0.7	±1.3	±0.1	±2	±1	±2	±0.5	±1.5	Max.	±0.5	±0.2	Max.

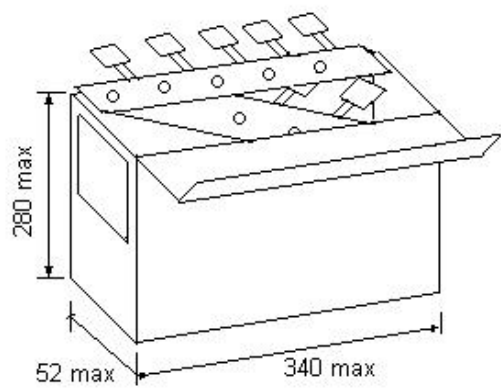
注意Note:

P1=3.85mm for F=5.08mm; P1=5.1mm for F=2.54mm.

散装 包装 : 1000个/包

盒带包装

Ammo Packaging



卷带包装

Tape and Reel Packaging

