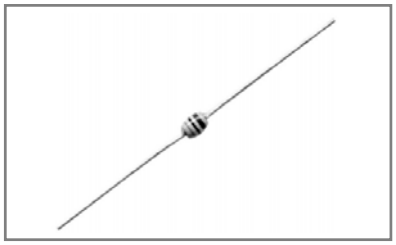
■轴向引线色环电容器
Axial Lead Color Code Capacitor



◆特征
Feature

* 体积小，容量大，适合自动安装的卷（编）带包装;
  Miniature size, large capacitance, tape and reel packaging suitable for auto-placement.
* 环氧树脂封装，从而具有优良的防潮性能、机械强度及耐热性;
  Epoxy resin coating creates excellent performance in humidity resistance, mechanical strength and heat resistance.
* 工业生产标准尺寸及多种脚型产品.
  Standard size, various lead configuration.

◆应用
Application

* 一般用途品
  General purpose goods

◆型号表示法
Part Number

ACC	03	B	104	K	500	P	52
A	B	C	D	E	F	G	H

A:

产品类别 Product Type	
代号 Code	类别 Type
ACC	轴向引线色环电容器 Axial Lead Color Code Capacitor

B:

本体尺寸代码 Nominal Body Size Code	
03	Φ1.9×3.0
08（空白） 常规	Φ2.2×3.2

C:

温度特性 Temperature Characteristics					
CH	0±60ppm/℃	(-25~+85℃)	CG/C0G	0±30ppm/℃	(-55~+125℃)
RH	-220±60ppm/℃	(-25~+85℃)	B/X7R	±15%	(-55~+125℃)
UJ	-750±120ppm/℃	(-25~+85 ℃)	F(Y)/Y5V	-80%~+30%	(-25~+85 ℃)
SL	-1000±140ppm/℃	(-25~+85℃)			

D:

标称容量 Nominal Capacitance
前两位数字为有效数字，后一位数字表示零的个数 First two digits are signify cant and the third digit is number of zeros . 例如： For example: 104=100000pF，5R6=5.6pF

E:

容量公差 Tolerance							
C	D	J	K	M	N	S	Z
±0.25pF	±0.5pF	±5.0%	±10%	±20%	±30%	+50%~-20%	+80%~-20%
C.D for C＜10PF NP0:C.D.J.K.M， X7R:K.M.N,S,Z							

F：

额定电压 Rated Voltage
前两位数字为有效数字，后一位数字表示零的个数 First two digits are signifycant and the third digit is number of zeros . 例如： For example: 500=50V,250=25V

G：

包装方式 Packaging Style		
编带 Tape	P	盒带包装 Ammo
	T	卷带包装 Reel

H

引脚形式（单位：mm） Lead Configuration	
26	编带内距 Tape width:26mm
52	编带内距 Tape width:52mm

◆尺寸、工作电压、容量关系表

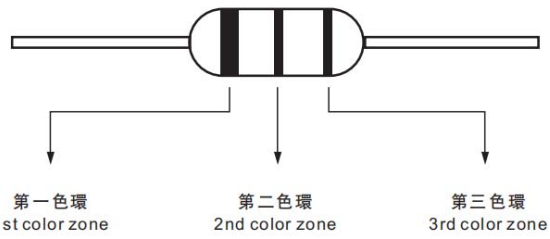
Size code, capacitance and voltage

温度特性 Temp. char	工作电压(V) Voltage		标称容量范围 Available Capacitance Range		容量公差 Capacitance Tolerance
尺寸规格 Size Code	08 型	03 型	08 型	03 型	
CG(N)	25	25	0R5~102	0R5~102	C: ±0.25pF D: ±0.5pF J: ±5% K: ±10% M: ±20%
	50	50	0R5~102	0R5~102	
CH	50	50	0R5~102	1R5~102	
RH	50	50	1R0~180	1R0~180	
UJ	50	50	2R2~300	2R2~300	
SL	50	50	1R0~680	1R0~680	
X7R(B)	25	25	101~334	101~104	K: ±10% M: ±20% N: ±30%
	50	50	101~224	101~333	
Y5V(Y/F)	25	25	103~125	103~224	M: ±20% N: ±30% Z: -20%~+80%
	50	50	103~105	103~224	

◆色环标记代码

Marking of Color Code

	标称容量 Nominal Capacitance		
	第一色环 1st color zone	第二色环 2nd color zone	第三色环 3rd color zone
	第一数字 1st digit	第二数字 2nd digit	第三数字 3rd digit
黑 Black	0	0	$\times 10^0$
棕 Brown	1	1	$\times 10^1$
红 Red	2	2	$\times 10^2$
橙 Orange	3	3	$\times 10^3$
黄 Yellow	4	4	$\times 10^4$
绿 Green	5	5	$\times 10^5$
蓝 Blue	6	6	
紫 Purple	7	7	
灰 Gray	8	8	
白 White	9	9	
金 Gold	—	—	×10-1
银 Silver	—	—	×10-2



*例如：标称容量为 104 时，色环为棕（1）+黑（0）+黄（4）；

E.G. If nominal capacitance is 104, respectively, brown + black + yellow should be marked;

*第一条色环线应稍粗，宽度约为其它两条的 1.5 倍。

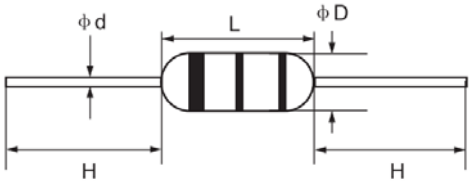
The width of the first line should be about 1.5 times than others.

◆外形尺寸
External Dimensions

＊ 单品
Bulk Products

单位 Unit：mm

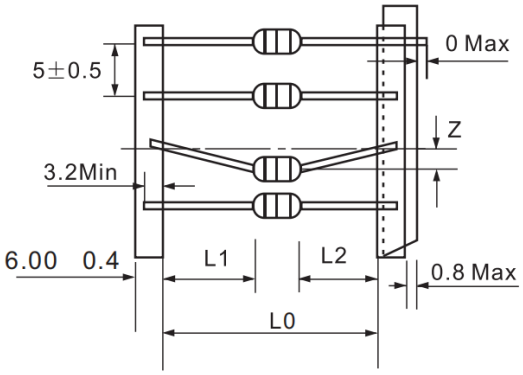
尺寸规格 Size Code	L	Φ D	Φd	H
08 型	≤3.2	≤2.2	0.40±0.05	≥10/20
03 型	≤3.0	≤1.9	0.40±0.05	≥10/20



＊ 编带尺寸
Taping dimensions

单位 Unit：mm

编带方式 Tape Style	L	Z	| L1-L2 |
编带内距： 26 Tape Width:	26±1.5	0.8max	1.0max
编带内距： 52 Tape Width:	52(+2.0~-1.0)	1.2max	



◆可靠性测试方法
Reliability Test Method

<table>
<tr><td>项目
Item</td><td colspan="2">技术要求
Technical Specification</td><td colspan="3">测试方法和备注
Test Method and Remarks</td></tr>
<tr><td rowspan="3">容量
Capacitance
(C)</td><td rowspan="2">I 类
Class I</td><td rowspan="2">应符合指定的误差级别
within the specified tolerance.</td><td>标称容量
Capacitance</td><td>测试频率
Measuring Frequency</td><td>测试电压 Measuring Voltage</td></tr>
<tr><td>C≤1000pF</td><td>1MHZ±10%</td><td rowspan="2">1.0±0.2V</td></tr>
<tr><td>II 类
Class II</td><td>应符合指定的误差级别
within the specified tolerance.</td><td>C＞1000 pF</td><td>1KHZ±10%</td></tr>
<tr><td rowspan="3">损耗角正切
Dissipation
Factor
(DF)</td><td rowspan="2">I 类
Class I</td><td rowspan="2">C≥50pF
DF≤0.15%
C＜50pF
DF≤1.5[(150/C)+7]
X10^{-4}</td><td>标称容量
Capacitance</td><td>测试频率
Measuring Frequency</td><td>测试电压
Measuring Voltage</td></tr>
<tr><td>≤1000pF</td><td>1MHZ±10%</td><td rowspan="2">1.0±0.2V</td></tr>
<tr><td>II 类
Class II</td><td>B</td><td>DF ≤3.5%</td><td>＞1000 pF</td><td>1KHZ±10%</td></tr>
<tr><td rowspan="2">绝缘电阻
Insulation
Resistance</td><td>I 类
Class I</td><td>C≤10nF
IR≥10000MΩ
C>10nF
R. C≥100 ΩF</td><td>标称容量
Capacitance</td><td>测试频率
Measuring Frequency</td><td>测试电压
Measuring Voltage</td></tr>
<tr><td>II 类
Class II</td><td>C≤25nF
IR≥4000MΩ
C>25nF
R.C≥100 ΩF</td><td>C≤10uF</td><td>1KHZ±10%</td><td>1.0±0.2V</td></tr>
<tr><td rowspan="2">耐溶剂性
Solvent Resistance</td><td colspan="2" rowspan="2">外观无可见损伤或异常,标记清晰。
No defects or abnormalities in appearance and legible marking.</td><td colspan="3" rowspan="2">测试电压:额定电压
Measuring Voltage: Rated Voltage
测试时间: 60±5 秒
Duration: 60±5s
测试湿度：≤75%
Test Humidity: ≤75%
测试温度： 25℃±3℃
Test Temprature: 25℃±3℃
测试充放电电流：≤50mA
Test Current: ≤50mA</td></tr>
<tr></tr>
<tr><td></td><td colspan="2">溶剂温度：23±5℃ Solvent temperature:23±5℃
将样品浸在溶剂中 1 分钟，用脱脂棉在样品有标志部位刷 10 次，重复 3 次.
put the sample into solvent 1 Min, and then take it out and brush sample’s notation area 10 times with pledget , repeat 3 times.th pledget , repeat 3 times.</td></tr>
</table>

项目 Item	技术要求 Technical Specification	测试方法和备注 Test Method and Remarks
耐电压 Withstandi-ng Voltage	不应有介质被击穿或损伤 No breakdown or damage.	测试电压 Measuring Voltage ： Ⅰ类:300%额定电压 Class Ⅰ:300% Rated voltage Ⅱ类:250%额定电压 ClassⅡ:250% Rated voltage 持续时间：5±1 秒 Duration: 5±1s 充/放电电流不应超过 50mA The charge/ discharge current is less than 50mA.
		端子与外装间 Between terminals and body： 施加电压：2.5UR 持续时间：1~5s Voltage: 2.5 times rated voltage Duration：1~5s 金属制小球法　Small metallic 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。 Small metallic balls with 1mm diameters shall be put in a vessel and the test capacitor shall be submerged except 2mm from the top of its component body and the terminals. The test voltage shall be applied between the short-circuited terminals and the metallic balls.
可焊性 Solder ability	上锡率应大于 95% Lead wire shall be at least 95% covered with a new solder coating.	将电容器引线浸入含有 25%松香的酒精溶液中 5-10 秒，然后浸入温度为: 245±5℃的金属焊锡（Sn-3Ag-0.5Cu）中 2.5(+0.5,-0.5)秒，注意：电容器本体底面距离锡面约 1.5~2mm。 The lead wire of capacitor is dipping into a 25% rosin solution of ethanol for 5s-10s and then into molten solder(Sn-3Ag-0.5Cu ）of 245±5℃ for 2.5(+0.5,-0.5)s. In both cases the depth of dipping is up to about 1.5~2mm from the terminal body.
耐焊接热 Resistance to Soldering Heat	ΔC/C: C0G: ≤ ± 2.5% 或±.25pF X7R:≤±12.5% 外观无可见损伤 No significant abnormality in appearance.	锡温：260 ±5℃　　时间：10±1 s Solder temperature: 260 ±5℃　　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。 Immersed conditions: Inserted into the PC board (with t=1.6mm, hole=1.0mm diameter) 对于Ⅰ类介质，试验后，应在标准条件下恢复 24±2 小时后才测试。 Recovery: For class I, 24±2 hours of recovery under the standard condition after test. 对于Ⅱ类介质，在试验前应先进行如下预处理： 150(−10, +0) ℃，1 小时，接着在标准条件下恢复 48 ±4 小时。 Preconditioning（Class Ⅱ）: 1 hour of preconditioning at 150(-10,+0) ℃, followed by 48 ±4 hours of recovery under the standard condition. 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（ Class Ⅱ） : 48 ±4 hours of recovery under the standard condition after test.

<table>
<tr><td>项目
Item</td><td colspan="2">技术要求
Technical Specification</td><td>测试方法和备注
Test Method and Remarks</td></tr>
<tr><td rowspan="4">高温负荷
High Temperature Loading Test</td><td colspan="2">ΔC/C
C0G:≤±3%或±.3pF
X7R:≤±12.5%
Y(F): ≤ ±30%</td><td rowspan="4">电压：1.5 倍额定电压
时间：1000 小时
温度：C0G/X7R 125℃,Y5V 85℃
充电电流：不应超过 50mA
放置条件：室温
放置时间： 24 小时（ C0G ），或 48 小时（X7R/Y5V），
Applied Voltage: 2Rated Voltage
Duration: 1000h
Temperature：125℃
Charge/ Discharge Current: 50mA max. Recovery Conditions: Room Temperature Recovery Time: 24h (C0G), or 48h (X7R/Y5V)</td></tr>
<tr><td colspan="2">DF
COG: Cr≥30pF ≤0.5%
Cr＜30pF ≤1/（400+20Cr）
X7R: ≤ 5.0%
Y(F): ≤12.5% (CR ≤ 0.1uF)
≤15.0%(1uF ＞ CR ＞ 0.1uF)
≤17.5% (CR ≥1uF)</td></tr>
<tr><td colspan="2">IR
绝缘电阻 Insulation Resistance:
≥ 500MΩ or 25 Ω.F 取较小值 Whichever is smaller</td></tr>
<tr><td colspan="2">外观无可见损伤
Appearance no visible damage</td></tr>
<tr><td rowspan="2">端头强度
Terminal Strength</td><td>抗拉强度
Tensile Strength</td><td rowspan="2">无引线断裂或松动等可见不良。
No abnormality such as cut lead or looseness.</td><td>固定电容器本体，沿引线方向逐步施加拉力直至 10N，然后保持 10 ±1 秒。
Fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N, and then keeping the force for 10 ±1 sec.</td></tr>
<tr><td>弯折强度
Bending Strength</td><td>对电容器引出端施加一 2.5N 的力，使引线弯曲 90 度，持续 5 秒，然后使引线回到原始位置，接着反方向操作一次为一个循环，共重复 2 次。
Each lead wire shall be subjected to a force of 2.5N and then be bent a angle of 90 degree then returned to initial position. This operation is done over a period of 5 sec. Then second bend in the opposite direction shall be made, repeat 2 times.</td></tr>
</table>

*以上所示“标准条件”解释如下：温度：5~35℃，相对湿度：45~85%，气压：86~106kPa

* Note on standard condition: " standard condition " referred to herein should be defined as follows:
5 to 35℃ of temperature, 45 to 75% of relative humidity, and 86 to 106kPa of atmospheric pressure.

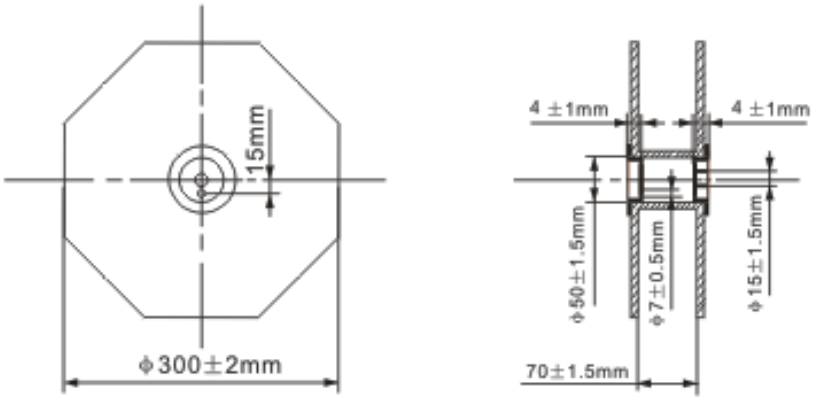
* 若测试结果有争议时，仲裁试验用标准大气条件为：温度：25±1℃，相对湿度：48%~52%， 气压：86~106kPa

* When there are questions concerning measurement results:In order to provide correlation data, the test should be conducted under a condition of 25 degrees plus/minus 1 centigrade of temperature, 48% through 52% of relative humidity and 86 to 106 kPa of atmospheric pressure.

◆包装
Packaging

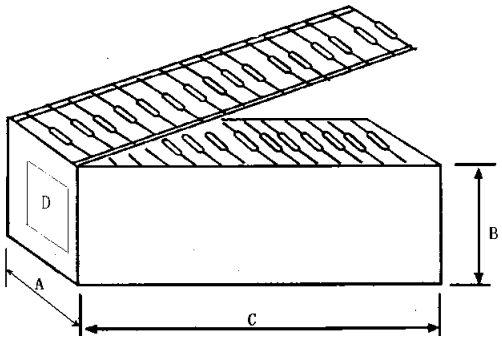
* 卷带包装

Tape and Reel Packaging



* 盒带包装

Ammo Packaging



尺寸规格 Size Code	编带方式 Tape Style	A ±5 mm	B ±5 mm	C ±5 mm	D
常规（08）	P52	80	80	265	贴标签 Lable
	P26	60	70	265	
03	P52	76	70	260	
	P26	60	70	260	

* 包装数量

Packaging Quantity

尺寸规格 Size Code	盒带包装 Ammo	卷带包装 Tape and Reel
常规（08）	5000pcs	5000pcs
03	5000pcs	5000pcs

单击下面可查看定价，库存，交付和生命周期等信息

>>FH(风华高科)