



# 交流瓷介电容器

# AC CERAMIC CAPACITORS

## 用途

该产品主要用于家用电器、办公设备、电子仪器、及其它电子产品作跨电源线、消火花、天地线耦合和旁路电容等。

## Application

Using as jumper wire, spark killer, antenna coupling, ground coupling, and bypass capacitors in household appliances, office equipment, electronic equipment and other electronic products.



## 安全认证 (safe authentication)

认证名称 Certification name	认证标记 Mark	认证类别 Categories	认证电容量分类 scope	认证标准 standards	证书编号 NO.
中国 CQC CHINA CQC		AC250/400V X1 AC250V/400V Y1	2pF~4700pF	GB/T6346.14-2015	CQC02001002287
		AC250/400V X1 AC250V/300V Y2	2pF~10000pF		CQC02001002289
美国 UL USA UL		AC400V X1 AC250V/400V Y1	2pF~4700pF	UL60384-14	E145038
		AC400V X1 AC250V/300V Y2	100pF~10000pF	UL60384-14 CSA E60384-14:09	
德国 VDE Germany VDE		AC250V/400V Y1	2pF~4700pF	DIN EN 60384-14 (VDE 0565-1-1):2014-04 EN 60384-14:2013-08	135256
		AC250V Y2	100pF~10000pF	DIN EN 60384-14/A1 (VDE 0565-1-1/A1):2017-04 EN 60384-14:2013/A1:2016	
		AC400V X1	100pF~10000pF	EN60384-14:2013 IEC 60384-14:2013/AMD1:2016	
加拿大 CSA Canada		AC400V X1 AC400V Y1	2pF~4700pF	CAN/CSA-E60384-14:09 CAN/CSA-E60384-1:03	2492570 (LR107420)
		AC400V X1 AC250V Y2	100pF~10000pF	CAN/CSA-E60384-14:09 ANSI/UL 60384-14-2009	2492571 (LR107420)
韩国 KTL Korea KTL		AC250V Y1	2pF~4700pF	KC60384-1 (2014-09) KC60384-14 (2014-09)	SU03029-7001D
		AC400V X1	100pF~10000pF	K60384-14 (2006-12)	SU03029-7002C
		AC250V Y2	100pF~10000pF	K60384-14 (2006-12)	SU03029-7003C
挪威 NEMKO Norway NEMKO		AC400V X1 AC250V/400V Y1	2pF~4700pF	EN 60384-14:2013:A1	P19223898
瑞典 SEMKO Sweden SEMKO		AC400V X1 AC250V/400V Y1	2pF~4700pF	EN 60384-14: 2013+A1:2016	1917430
芬兰 FIMKO Finland FIMKO		AC400V X1 AC250V/400V Y1	2pF~4700pF	EN 60384-14: 2013+A1:2016	F1/40432
丹麦 DEMKO Denmark DEMKO		AC400V X1 AC250V/400V Y1	2pF~4700pF	EN 60384-14:2013/A1:2016 EN 60384-14:2013	D-04994-M1

□外观及结构(Appearance and Structure)

序号 (NO)	编码 code	品名 (CODE NO.)	Dmax (mm)	Tmax (mm)	F (mm)	d (mm)
1		CT81-400VAC-07*-2B4-47K-X1Y1-3	7.5	6.0	10.0	0.52
2		CT81-400VAC-07*-2B4-68K-X1Y1-3	7.5	6.0	10.0	0.52
3		CT81-400VAC-07*-2B4-101K-X1Y1-3	7.5	6.0	10.0	0.52
4		CT81-400VAC-07*-2B4-151K-X1Y1-3	7.5	6.0	10.0	0.52
5		CT81-400VAC-07*-2B4-221K-X1Y1-3	7.5	6.0	10.0	0.52
6		CT81-400VAC-07*-2B4-331K-X1Y1-3	7.5	6.0	10.0	0.52
7		CT81-400VAC-08*-2B4-471K-X1Y1-3	8.5	6.0	10.0	0.52
8		CT81-400VAC-09*-2B4-681K-X1Y1-3	9.5	6.0	10.0	0.52
9		CT81-400VAC-11*-2B4-102K-X1Y1-3	11.0	6.0	10.0	0.52
10		CT81-400VAC-07*-2E4-102M-X1Y1-3	7.5	6.0	10.0	0.52
11		CT81-400VAC-08*-2E4-152M-X1Y1-3	8.5	6.0	10.0	0.52
12		CT81-400VAC-09*-2E4-222M-X1Y1-3	9.5	6.0	10.0	0.52
13		CT81-400VAC-11*-2E4-332M-X1Y1-3	11.0	6.0	10.0	0.52
14		CT81-400VAC-13*-2E4-472M-X1Y1-3	13.5	6.0	10.0	0.52
15		CT81-400VAC-07*-2F4-102M-X1Y1-3	7.5	6.0	10.0	0.52
16		CT81-400VAC-08*-2F4-152M-X1Y1-3	8.5	6.0	10.0	0.52
17		CT81-400VAC-08*-2F4-222M-X1Y1-3	8.5	6.0	10.0	0.52
18		CT81-400VAC-09*-2F4-332M-X1Y1-3	9.5	6.0	10.0	0.52
23		CT81-400VAC-11*-2F4-472M-X1Y1-3	11.0	6.0	10.0	0.52
24		CT81-250VAC-06*-2B4-101K-X1Y2-*	6.5	5.0	7.5/10.0	0.52
25		CT81-250VAC-06*-2B4-151K-X1Y2-*	6.5	5.0	7.5/10.0	0.52
26		CT81-250VAC-06*-2B4-221K-X1Y2-*	6.5	5.0	7.5/10.0	0.52
27		CT81-250VAC-06*-2B4-331K-X1Y2-*	6.5	5.0	7.5/10.0	0.52
28		CT81-250VAC-07*-2B4-471K-X1Y2-*	7.5	5.0	7.5/10.0	0.52
29		CT81-250VAC-08*-2B4-681K-X1Y2-*	8.5	5.0	7.5/10.0	0.52
		CT81-250VAC-09*-2B4-102K-X1Y2-*	9.5	5.0	7.5/10.0	0.52
30		CT81-250VAC-06*-2E4-102M-X1Y2-*	6.5	5.0	7.5/10.0	0.52
31		CT81-250VAC-08*-2E4-152M-X1Y2-*	8.5	5.0	7.5/10.0	0.52
32		CT81-250VAC-08*-2E4-222M-X1Y2-*	8.5	5.0	7.5/10.0	0.52
33		CT81-250VAC-09*-2E4-332M-X1Y2-*	9.5	5.0	7.5/10.0	0.52
34		CT81-250VAC-11*-2E4-472M-X1Y2-*	11.0	5.0	7.5/10.0	0.52
35		CT81-250VAC-06*-2F4-102M-X1Y2-*	6.5	5.0	7.5/10.0	0.52
36		CT81-250VAC-07*-2F4-152M-X1Y2-*	7.5	5.0	7.5/10.0	0.52
37		CT81-250VAC-08*-2F4-222M-X1Y2-*	8.5	5.0	7.5/10.0	0.52
38		CT81-250VAC-10*-2F4-472M-X1Y2-*	10.0	5.0	7.5/10.0	0.52
39		CT81-250VAC-13*-2F4-103M-X1Y2-*	13.5	5.0	7.5/10.0	0.52

序号 (NO)	编码 code	品名 (CODE NO.)	Dmax (mm)	Tmax (mm)	F (mm)	d (mm)
1		CT81-400VAC-07*-2B4-47K-X1Y1-3T*	7.5	6.0	10.0	0.52
2		CT81-400VAC-07*-2B4-68K-X1Y1-3T*	7.5	6.0	10.0	0.52
3		CT81-400VAC-07*-2B4-101K-X1Y1-3T*	7.5	6.0	10.0	0.52
4		CT81-400VAC-07*-2B4-151K-X1Y1-3T*	7.5	6.0	10.0	0.52
5		CT81-400VAC-07*-2B4-221K-X1Y1-3T*	7.5	6.0	10.0	0.52
6		CT81-400VAC-07*-2B4-331K-X1Y1-3T*	7.5	6.0	10.0	0.52
7		CT81-400VAC-08*-2B4-471K-X1Y1-3T*	8.5	6.0	10.0	0.52
8		CT81-400VAC-09*-2B4-681K-X1Y1-3T*	9.5	6.0	10.0	0.52
9		CT81-400VAC-11*-2B4-102K-X1Y1-3T*	11.0	6.0	10.0	0.52
10		CT81-400VAC-07*-2E4-102M-X1Y1-3T*	7.5	6.0	10.0	0.52
11		CT81-400VAC-08*-2E4-152M-X1Y1-3T*	8.5	6.0	10.0	0.52
12		CT81-400VAC-09*-2E4-222M-X1Y1-3T*	9.5	6.0	10.0	0.52
13		CT81-400VAC-11*-2E4-332M-X1Y1-3T*	11.0	6.0	10.0	0.52
14		CT81-400VAC-13*-2E4-472M-X1Y1-3T*	13.5	6.0	10.0	0.52
15		CT81-400VAC-07*-2F4-102M-X1Y1-3T*	7.5	6.0	10.0	0.52
16		CT81-400VAC-08*-2F4-152M-X1Y1-3T*	8.5	6.0	10.0	0.52
17		CT81-400VAC-08*-2F4-222M-X1Y1-3T*	8.5	6.0	10.0	0.52
18		CT81-400VAC-09*-2F4-332M-X1Y1-3T*	9.5	6.0	10.0	0.52
23		CT81-400VAC-11*-2F4-472M-X1Y1-3T*	11.0	6.0	10.0	0.52
24		CT81-250VAC-06*-2B4-101K-X1Y2-*T*	6.5	5.0	7.5/10.0	0.52
25		CT81-250VAC-06*-2B4-151K-X1Y2-*T*	6.5	5.0	7.5/10.0	0.52
26		CT81-250VAC-06*-2B4-221K-X1Y2-*T*	6.5	5.0	7.5/10.0	0.52
27		CT81-250VAC-06*-2B4-331K-X1Y2-*T*	6.5	5.0	7.5/10.0	0.52
28		CT81-250VAC-07*-2B4-471K-X1Y2-*T*	7.5	5.0	7.5/10.0	0.52
29		CT81-250VAC-08*-2B4-681K-X1Y2-*T*	8.5	5.0	7.5/10.0	0.52
		CT81-250VAC-09*-2B4-102K-X1Y2-*T*	9.5	5.0	7.5/10.0	0.52
30		CT81-250VAC-06*-2E4-102M-X1Y2-*T*	6.5	5.0	7.5/10.0	0.52
31		CT81-250VAC-08*-2E4-152M-X1Y2-*T*	8.5	5.0	7.5/10.0	0.52
32		CT81-250VAC-08*-2E4-222M-X1Y2-*T*	8.5	5.0	7.5/10.0	0.52
33		CT81-250VAC-09*-2E4-332M-X1Y2-*T*	9.5	5.0	7.5/10.0	0.52
34		CT81-250VAC-11*-2E4-472M-X1Y2-*T*	11.0	5.0	7.5/10.0	0.52
35		CT81-250VAC-06*-2F4-102M-X1Y2-*T*	6.5	5.0	7.5/10.0	0.52
36		CT81-250VAC-07*-2F4-152M-X1Y2-*T*	7.5	5.0	7.5/10.0	0.52
37		CT81-250VAC-08*-2F4-222M-X1Y2-*T*	8.5	5.0	7.5/10.0	0.52
38		CT81-250VAC-10*-2F4-472M-X1Y2-*T*	10.0	5.0	7.5/10.0	0.52
39		CT81-250VAC-13*-2F4-103M-X1Y2-*T*	13.5	5.0	7.5/10.0	0.52

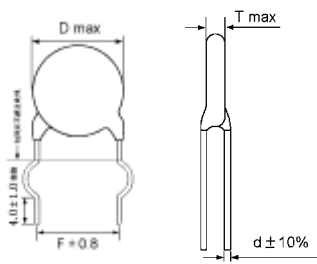
注：“\*”表示根据客户要求(Note: “\*” indicates according to customer requirements.)

## □ 标记 (Marking)

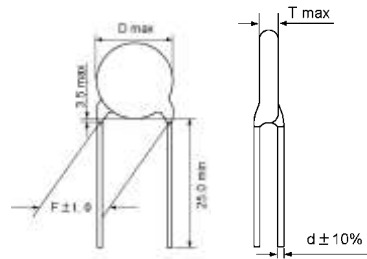
示例 (Example)	项目 (Item)	
	CT81	种类 (Class)
	222	标称容量 (Rated Capacitance)
	M	容量误差 (Tolerance of Capacitance)
	LY	公司代号 (Manufacturer's Code)
		UL 认证标记 (UL Recognized Mark)
		CSA 认证标记 (CSA Monogram)
		VDE 认证标记 (VDE Approval Mark)
		CQC 认证标记 (CQC Approval Mark)

## □ 引线形式 Lead Shape

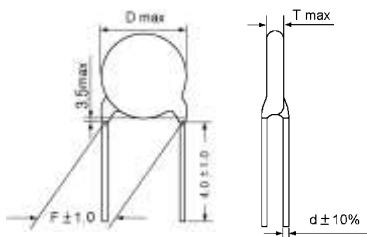
散件 (bulk): (单位: mm)



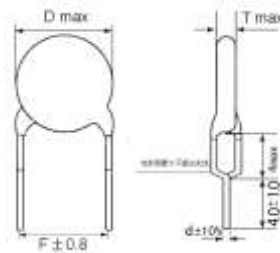
A 式  
Type A



b 式  
Type b



d 式  
Type d



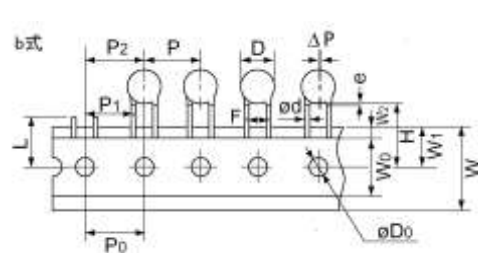
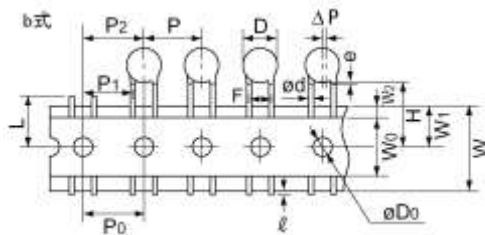
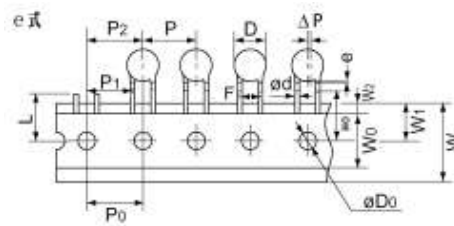
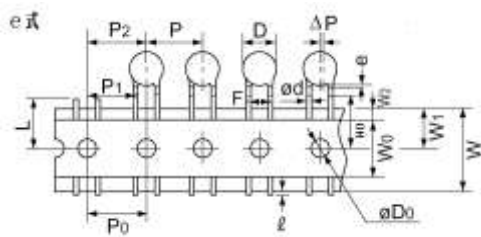
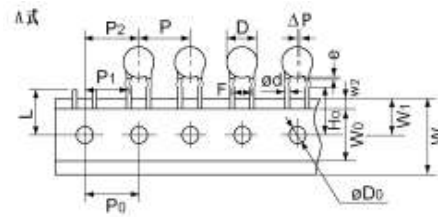
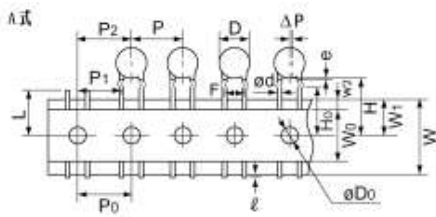
e 式  
Type e

注: 引线长度根据客户要求 (Note: lead length according to customer requirements)

编带(Taping Package):

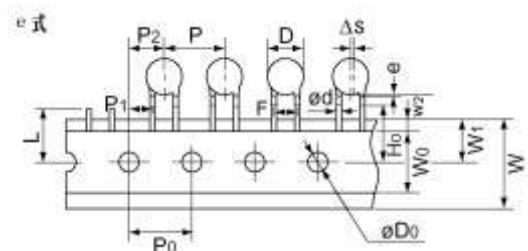
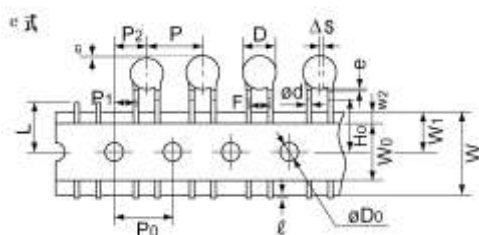
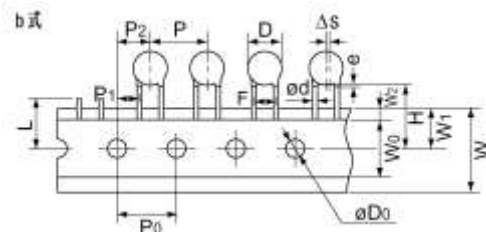
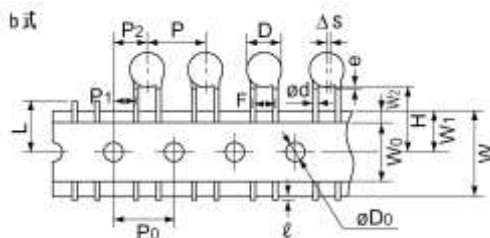
●b、e、A 式 (引线间距  $F=7.5\text{mm}$ , 孔间距  $P_0=12.7\text{mm}$ , 产品间距  $P=12.7\text{mm}$ )

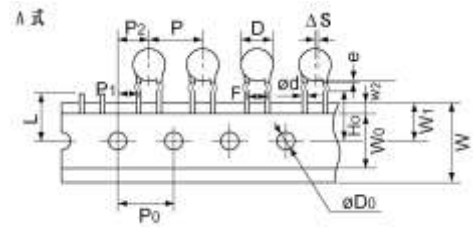
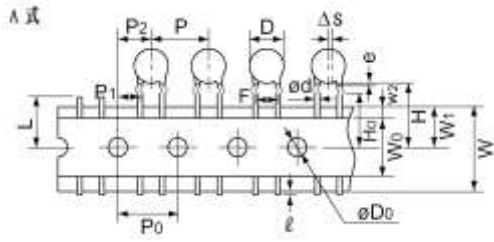
Type b、e、A (lead spacing  $F=7.5\text{mm}$ , Hole spacing  $P_0=12.7\text{mm}$ , Product spacing  $P=12.7\text{mm}$ )



●b、e、A 式 (引线间距  $F=7.5\text{mm}$ , 孔间距  $P_0=15.0\text{mm}$ , 产品间距  $P=15.0\text{mm}$ )

Type b、e、A (lead spacing  $F=7.5\text{mm}$ , Hole spacing  $P_0=15.0\text{mm}$ , Product spacing  $P=15.0\text{mm}$ )

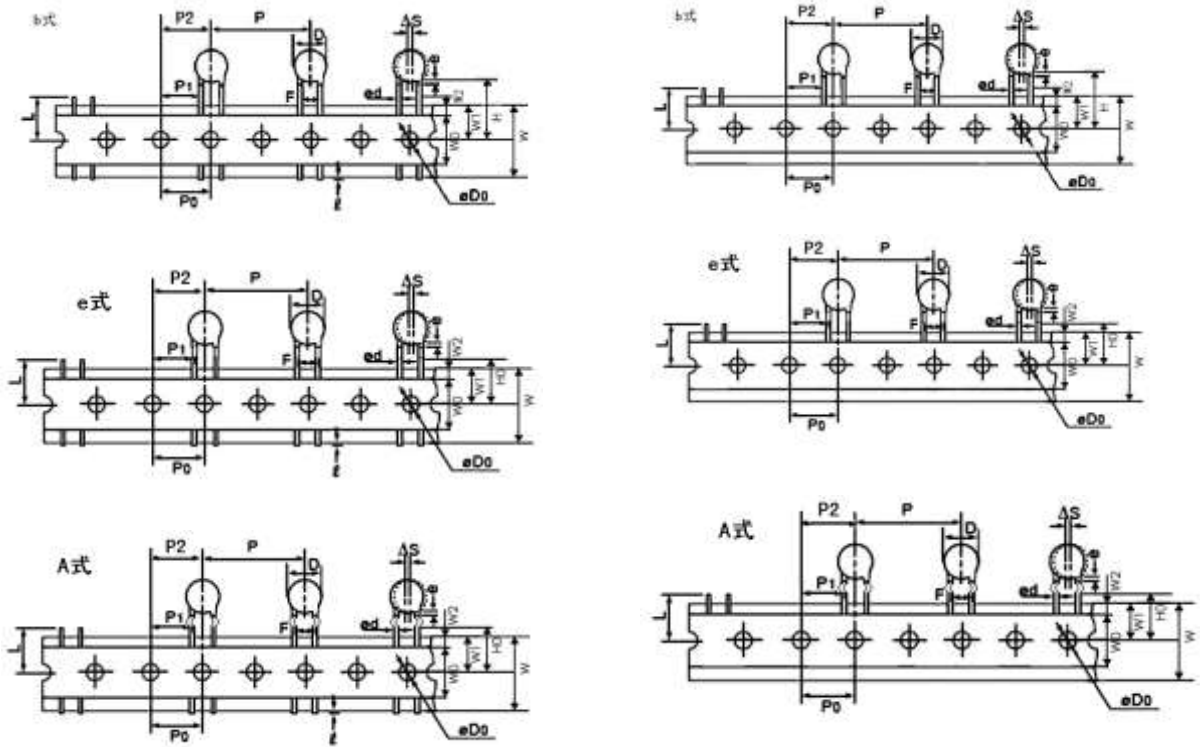




项目 Item	代号 Code	Dimensions (mm)	
引线间距 Lead spacing	F	7.5 ± 1.0	
产品间距 Pitch of component	P	12.7 ± 0.5	15.0 ± 1.0
传送孔间距 Pitch of sprocket hole	P0	12.7 ± 0.3	15.0 ± 0.3
传送孔位置偏差 Position of sprocket hole	P1	8.95 ± 1.0	3.75 ± 0.7
	P2	12.7 ± 1.3	7.5 ± 1.3
引线线径 Lead diameter	d	0.52 ± 0.052	
产品倾倒 Deviation across tape	Δ h	0 ± 2.0max	
纸带宽度 Carrier tape width	W	18.0 ± 0.5	
胶带宽度 Hold-down tape width	W0	6.0min	
传送孔位置偏差 Position of sprocket hole	W1	9.0 ± 0.5	
胶带偏差 Hold-down tape distortion	W2	1.5 ± 1.5	
引线弯处到传送孔中心 Lead distance between reference And kink lead	H0	16.0-0.5/+1.5	
产品至纸带中心位置 Lead distance between reference and bottom planes	H	20 ± 2	
传送孔孔径 Diameter of sprocket hole	D0	4.0 ± 0.2	
不良切断位置 Portion to cut	L	11.0+0/-1.0	
封装料垂延 Coating extension on lead	e	3.5max (b 式 Type b)	
		不过弯中央 No over the center of crimp (A、e 式 Type A、e)	
纸带厚度 thickness of tape	t1	0.5 ± 0.3	
	t2	1.5max	
引线弹性弯曲 Lead flexible blend	Δ S (Δ P)	0 ± 2.0	
引线尾端长度 Lead the end of length	ℓ	1.0max	

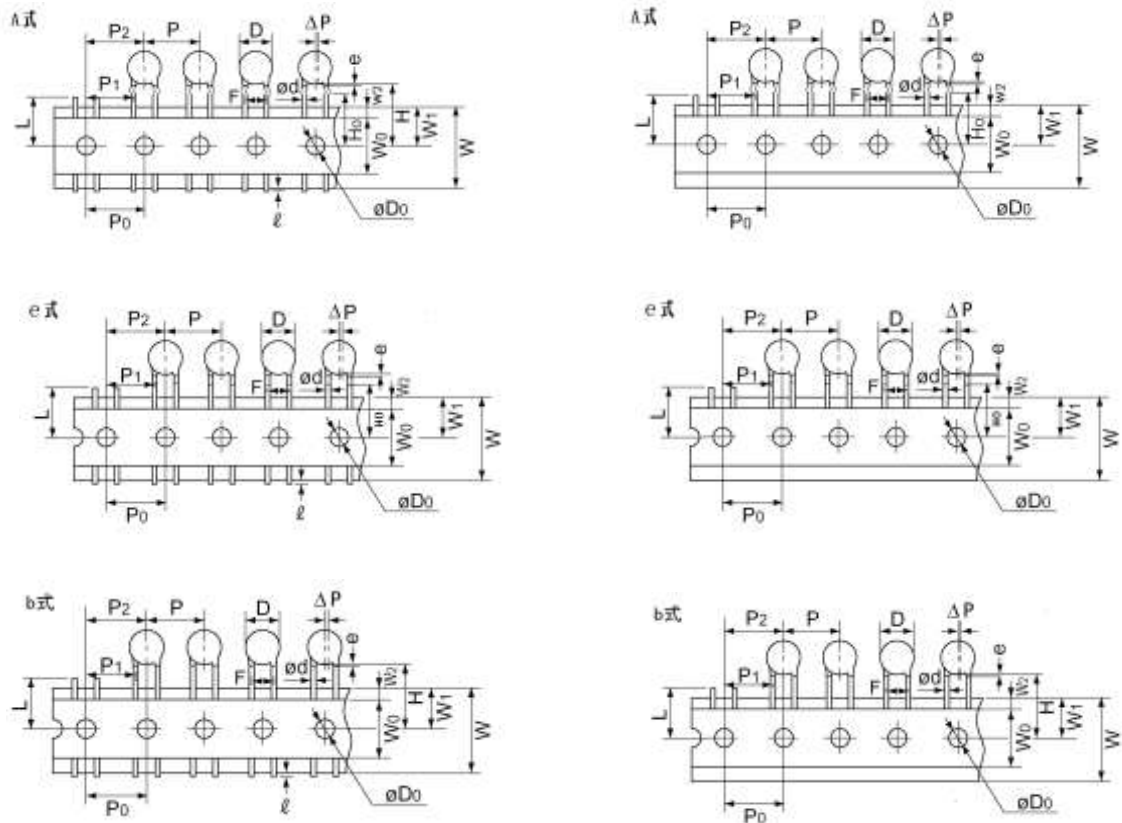
●b、e、A 式 (引线间距  $F=10.0\text{mm}$ , 孔间距  $P_0=12.7\text{mm}$ , 产品间距  $P=25.4\text{mm}$ )

Type b、e、A (lead spacing  $F=10.0\text{mm}$ , Hole spacing  $P_0=12.7\text{mm}$ , Product spacing  $P=25.4\text{mm}$ )



●b、e、A 式 (引线间距  $F=10.0\text{mm}$ , 孔间距  $P_0=15.0\text{mm}$ , 产品间距  $P=15.0\text{mm}$ )

Type b、e、A (lead spacing  $F=10.0\text{mm}$ , Hole spacing  $P_0=15.0\text{mm}$ , Product spacing  $P=15.0\text{mm}$ )



注：左侧编带图为一次编带，右侧编带图为二次编带（left banding diagram is primary banding ;right banding diagram is secondary banding.）



项目 Item	代号 Code	尺寸 Dimensions (mm)	
引线线径 Lead diameter	F	10.0 ± 1.0	
产品间距 Pitch of component	P	15.0 ± 1.0	25.4 ± 1.0
传送孔间距 Pitch of sprocket hole	P0	15.0 ± 0.3	12.7 ± 0.3
传送孔位置偏差 Position of sprocket hole	P1	10.0 ± 1.5	7.7 ± 1.5
	P2	15.0 ± 1.3	12.7 ± 1.3
引线间距 Lead spacing	d	0.52 ± 0.052	
产品倾倒 Deviation across tape	Δh	0 ± 2.0max	
纸带宽度 Carrier tape width	W	18.0 ± 0.5	
胶带宽度 Hold-down tape width	W0	6.0min	
传送孔位置偏差 Position of sprocket hole	W1	9.0 ± 0.5	
胶带偏差 Hold-down tape distortion	W2	1.5 ± 1.5	
引线弯处到传送孔中心 Lead distance between reference And kink lead	H0	16.0-0.5/+2.0	
产品至纸带中心位置 Lead distance between reference and bottom planes	H	20.0 +1.5/-1.0	
传送孔孔径 Diameter of sprocket hole	D0	4.0 ± 0.2	
不良切断位置 Portion to cut	L	11.0+0/-1.0	
包封料垂延 Coating extension on lead	e	3.5max(b 式 Type b)	
		不过弯中央 No over the center of crimp (A、a、e 式 Type A、a、e)	
纸带厚度 thickness of tape	t1	0.5 ± 0.3	
	t2	1.5max	
引线弹性弯曲 Lead flexible blend	ΔS (ΔP)	0 ± 2.0	
引线尾端长度 Lead the end of length	ℓ	1.0max	



## □命名方法 Part Code Designation

CT81 - 400VAC - 10 b - 2E4 - 222 M - X1Y1 - 3 T2

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

### ①种类 Class

代码 Code	种类 Class
CT81	II类高压 Class II High-Voltage

### ⑥标称容量 Rated Capacitance

代码 Code	静电容量 Capacitance	代码 Code	静电容量 Capacitance
152	1500 pF	472	4700 pF
332	3300 pF	103	10000 pF
以此类推 And so on			

### ②额定电压 Rated Voltage

代码 Code	额定电压 Rated Vol.	代码 Code	额定电压 Rated Vol.
250VAC	AC250V		
400VAC	AC400V		

### ⑦容量公差 Tolerance

代码 Code	容量公差 Tolerance
K	± 10%
M	± 20%

### ③主体外径 Body Diameter

代码 Code	最大外径 Max Diameter of Body	代码 Code	最大外径 Max Diameter of Body
06	6.5mm	10	10.0mm
07	7.5mm	11	11.0mm
08	8.5mm	12	12.5mm
09	9.5mm	13	13.5mm

### ⑧试验电压类别 Type of Test Voltage

代码 Code	试验电压 Test Voltage
X1Y1	AC4000V
X1Y2	AC2600V

### ④引线形式 Lead Shape

代码 Code	形式 Shape
A	单外弯 Single outside Crimp
b	直脚 Straight long
d	短直脚 Straight Short
e	前后弯 Vertical crimp

### ⑨引线间距 Lead spacing

代码 Code	间距 spacing
1	5.0mm
2	7.5mm
3	10.0mm

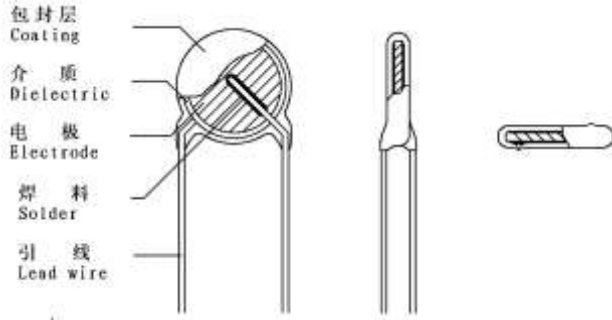
### ⑤温度特性 Temperature Characteristic

代码 Code	容量变化 Cap. Change
2B4	-10~+10%
2E4	-56~+22%
2F4	-80~+30%

### ⑩包装方式 package Shape

代码 Code	形式 Shape
T1	P0=12.7mm P=12.7mm
T2	P0=12.7mm P=25.4mm
T3	P0=15.0mm P=15.0mm

□结构(Structure)



包封层(Coating) : 环氧树脂(Epoxy Resin)

介质(Dielectric): 陶瓷 (Ceramic)

电极(Electrode) : 银 (Silver)

焊料(Solder) : 锡(Alloy Tin)

引线(Lead Wire) : 镀锡引出线(Lead)

□主要材料(Main Material)

SrCO<sub>3</sub> BaCO<sub>3</sub> TiO<sub>2</sub> Bi<sub>2</sub>O<sub>3</sub> CaCO<sub>3</sub> Nb<sub>2</sub>O<sub>5</sub> MgO

银膏(Silver paste) 环氧树脂(Epoxy Resin)

□室内条件(Room Condition)

温度(Temp.): 15~35℃ 湿度(R. H.): 45~75%

气压(Atm pressure): 86~106kPa(860~1060mbar)

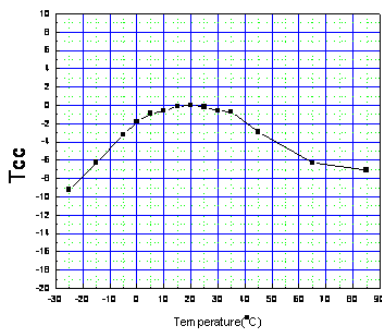
□测试条件(Test Condition)

温度(Temp.): 20±2℃ 湿度(R. H.): 50~60%

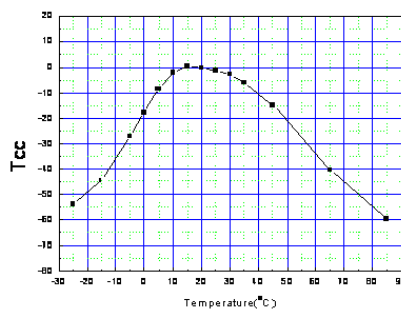
电压(Vol.): 1.0±0.2Vrms 频率(Freq.): 1±0.2KHz

□容量—温度变化曲线 Cap.—Temp. Curve

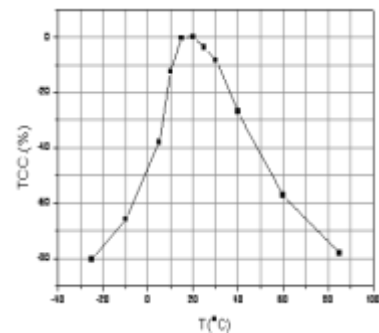
2B4



2E4



2F4



□散件包装 (Bulk packing)

1、包装数量 (packing quantity):

成型方式 Molding mode	袋装数量(支) Quantity per bag (PCS)	备注 Remark
A、d、b、e	1000 ± 1/500 ± 1	塑料袋尺寸: Size of plastic bag 1#: 275×200mm 2#: 215×160mm

2、包装标识 (packing marking):

示例(Example)	项 目 ( Item )	
		公司商标 (Manufacturer's Marking)
		环保标识 RoHS Designation
	物料编码 Code	用户要求时 When the customer require
	规格型号 Model	详见如上表格, (Please see the detail in the upper sheet)
	生产批号 Product lots	生产批号 Product lots
	成型代号 lead shape	用户要求时 When the customer require
	生产日期 Productive date	产品生产时间 the produce time of the product
	数 量 Quantity	每盒的包装数量 the packing quantity per plastic bag

3、外包装 (over-wrap packing):

内包装箱 (internal packing boxes) (A1:360×200×140mm、A2:198×177×138mm)

外包装箱 (over-wrap boxes) (B1:460×380×220mm、B2:425×380×170mm)

装箱数量应为 100、500 的整数倍。(The packing quantity should be integral multiple of one-hundred or five-hundred. )

□ 编带包装 (Taping Package packing)

1、包装数量 (packing quantity):

引线间距 Lead spacing	包装盒分类 Kinds of plastic box	成型方式 Molding mode	包装数量 Quantity per bag	备注 Remark
F=10.0mm P0=12.7mm P=25.4mm	1#/2#	A、b、e	800~1000	包装盒尺寸: Size of plastic box 1 <sup>st</sup> : 325 × 250 × 47mm 2 <sup>nd</sup> : 325 × 290 × 47mm
F=10.0mm P0=P=15.0mm	1#/2#	A、b、e	800~1000	
F=7.5mm P0=P=15.0mm	1#/2#	A、b、e	1000~2000	
F=7.5mm P0=P=12.7mm	1#/2#	A、b、e	1000~2000	

2、包装标识 (packing marking):

示例 (Example)	项 目 (Item)	
		公司商标 (Manufacturer's Marking)
		环保标识 RoHS Designation
	物料编码 Code	用户要求时 When the customer require
	规格型号 Model	详见如上表格, (Please see the detail in the upper sheet)
	生产批号 Product lots	生产批号 Product lots
	成型代号 lead shape	用户要求时 When the customer require
	生产日期 Productive date	产品生产时间 the produce time of the product
	数 量 Quantity	每盒的包装数量 the packing quantity per plastic bag

3、外包装 (over-wrap packing):

外包装箱 (over-wrap boxes) (B1: 520 × 370 × 280mm、B2: 358 × 312 × 275mm)

装箱数量应为最小包装的整数倍。(The packing quantity should be integral multiple of minimal packaging. )