



东莞市威庆电子有限公司，成立于2007年，并于2008年正式于广东成立东莞工厂始终坚持“薄膜电容选型及应用，找WQC”这一服务理念。威庆专业从事各类金属薄膜电容器（包括安规X2电容、安规Y1电容、安规Y2电容、盒装低噪音CBB21电容、MMKP82电容、CBB61启动电容、CBB65启动电容、）产品主要使用领域有新能源，储能，PC/PD电源，家电控制板PCBA，工业电源等等。东莞生产基地+贵州生产基地，占地面积45000平方米，企业已经荣获ISO9001、ISO14001、IATF16949（汽车行业的国际标准）质量管理体系认证等证书，制程条件全部符合欧盟RoHS、REACH标准要求。威庆坚持围绕客户需求开发创新产品，加大研究投入，助力行业进步。威庆WQC品牌安规X2电容、安规Y1电容、安规Y2电容、均已取得UL VDE CQC KC等国际认证，CBB65启动电容，CBB61启动电容已取得S3的防爆等级证书,且全部产品符合国际标准要求，产品可以销往全世界。





中国.贵州

🚩 成立于 2023年

👤 职员工约 210人

🏠 厂房面积 3.5万m²

中国.东莞

🚩 成立于 2010年

👤 职员工约 110人

🏠 厂房面积 1万m²



一. Ceramic Capacitor Part number system

The 18 digits part number is formed as follow:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

0	2	7															
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Digit 1~3 Type Code

Code	Type	Code	Type	Code	Type	Code	Type
O25	NPO	O29	Y5V				
O26	SL						
O27	Y5P						
O28	Y5U						

Temperature characteristics:

The temperature coefficient is marked according to GB. IEC standard, and the reference temperature is 20°C.

Code	TYPE	NOTS
Ceramic Capacitors		
O25	NPO	+350-1000PPM/°C
O26	SL	±60PPM/°C
O27	Y5P	+/-10%
O28	Y5U	+22%-56%
O29	Y5V	+22%-82%

TYPE	Class I T.C Type		Class II Hi-K Type			
Temp. char	SL	NPO	Y5P	Y5U	Y5V	

TC Code	Y5P	Y5U	Y5V	SL / NPO
Operating Temp. Range	-30~125°C			

Digit 4~5 Rated Voltage Code

	A	B	C	D	E	F	G	H	J	K	L	M	N
1		12	16	20	25			50	63			1100	
2	100	125	160	200	250	315	400	500	630	800	120		
3	1000	1250	1600	2000	2500	3000	4000	5000	6000	8000	1200	1400	
	P	Q	R	S	T	U	V	W	X	Y			
1	240	300	330	440	540	600	700	850	900				
2	275	305	350	450	520		760						
3	280	310		480									

Explanation: Refer to JIS standard, Letter and then number indicate AC, but number and then Letter indicate DC, for example, 3A indicate 1000VDC, A3 indicate 1000VAC.

Digit 6~8 Capacitance Expressed in 3-digit code 3 Code

The first 2digits indicate significant figures,and the third digit specifies the number of zero to follow. This gives the capacitance in picofarads.

For examples:

$102 = 10 \times 10^2 \text{PF} = 1,000 \text{PF} = 1.0 \text{nF} = 0.001 \mu\text{F}$ $105 = 10 \times 10^5 \text{PF} = 1,000,000 \text{PF} = 1000 \text{nF} = 1 \mu\text{F}$

Digit 9 Capacitance Tolerance Code

Tolerance	±0.25PF	±0.5PF	±5%	±10%	±20%	+50%/-20%	+80%/-20%	+100%/-0%
Code	C	D	J	K	M	S	Z	P

Digit 10~11 Diameter Size Code

Diameter Type

Diameter max(mm)徑	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	...
Case No.	05	06	07	08	09	10	11	12	13	***

Digit 12 Lead Spacing Code

Pitch	2.5	5.0	7.5	10	Special
Case No.	A	B	E	D	Z

Digit 13 Lead Form Code

Lead Type

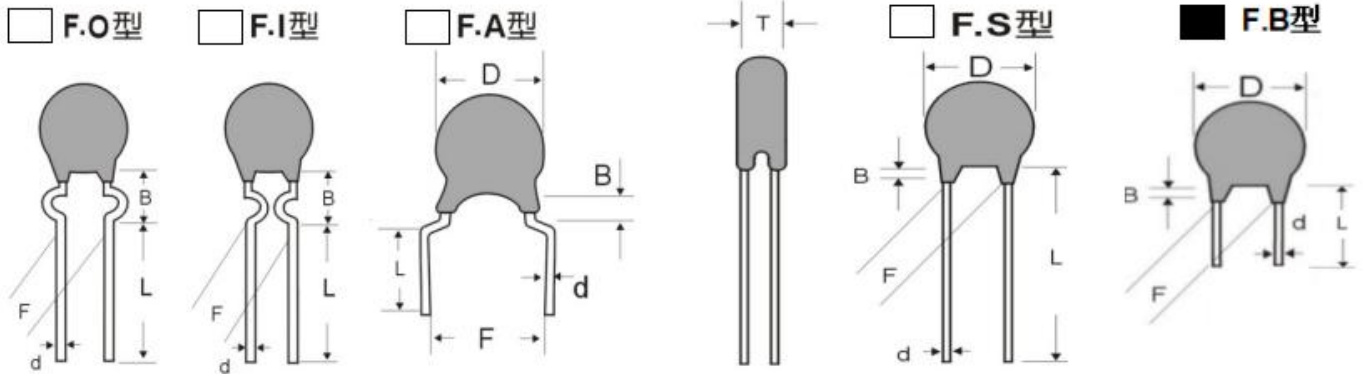
Code	L	H	K	M	O	P	R	T	S
Lead Type	Long line	Short line	Inside of bending	Outside of bending	Double curved	Before and after become warped line	The bending line	Taping	Customer Special Require

Digit 14~16 Lead Length(Straight) and Tolerance of Lead Length(straight) and Expressed in 3-Letter Code

Example : Code 035:35/ 10=3.5mm 230:230/ 10=23mm

Digit 17~18 Internal use Color\material group\packing\ place of production

二. Dimensions and Tolerance



Name specification	D \pm 0.5MM	F \pm 0.8MM	L \pm 0.5MM	T \pm 0.5M M	d \pm 0.05MM	B
Y5V 223M 1000V	11	7.5	3.5	3.0	0.5	<3.0

Marking Explain:

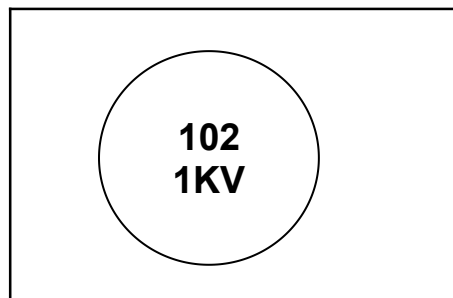
1. No need to label material code, Unless the client requests it.

material	Mar. code
NPO	N
SL	SL
Y5P	B
Y5U	E
Y5V	F

2. Nominal Capacitance : 220PF=221

3.Representative voltage: 1KV

Marking



2.1Dimensions (mm)

Rated Voltage (VDC)	Temperature Coefficient Group					Dimension (mm)		Lead Size (mm)		
	Y5P	Y5U	Y5V	SL	NP0	D±0.5	T±0.5	F±0.8	d±0.05	
	Nominal Capacitance (pF)									
1000	100-820	/	/	20-100	0.5-22	5.5	2.5	5.0±0.8	0.45	
	1000	/	/	/	/	6.0				
	/	1500-3300	4700-6800	/	/	6.5				
	1500-2200	4700-5600	/	/	/	7.5				
	2700	/	10000	/	/	8.5		7.5±0.8 10±0.8	0.55/0.6/0.7	
	/	6800	15000	/	/	9.5				
	3300	10000	/	/	/	10.5				
	4700	/	/	/	/	11.5				
2000	100-470	1000	1500-2200	/	/	6.0	2.5/3.0	5.0±0.8	0.5	
	560-820	/	3300	10-120	0.5-10	7.0				
	1000	2200	4700	68	/	8.0				
	2000	1500	4700	6800	/	/	10.0	3.0	7.5±0.8	0.6
		1800-2200	/	10000	/	/	11.0			
		2700	/	/	/	/	12.0			
		3300	/	/	/	/	13.0			
		2200	/	/	/	/	14.0			
		4700	10000	/	/	/	14.5			
3000	100-470	680-1000	1500	27-68	3-22	6.0	3.0/3.5	7.5±0.8	0.6	
	270-680	/	2200	/	/	7.0				
	/	1500	3300	82	/	8.0	3.5			
	1000	2200	4700	/	/	9.0				
	/	3300	6800-10000	/	/	11.0				
	/	4700	10000	/	/	13.0				
	/	10000	/	/	/	17.5				
	/	/	/	/	/	/				10.0±0.8

2.2 Taping And Dimensions (mm)

Figure	Fig.1		Fig.2				
	Symbol	P=5.0	P=7.5		P=10.0		
	Po	12.7±0.3	12.7±0.3	12.7±0.3	12.7±0.3	12.7±0.3	
	P	12.7± 1.0	25.4± 1.0	25.4± 1.0	25.4± 1.0	25.4± 1.0	
	P1	3.85±0.7	8.95±0.7	7.7±0.7	7.7±0.7	7.7±0.7	
	P2	6.35± 1.3	12.7± 1.3	12.7± 1.3	12.7± 1.3	12.7± 1.3	
	F	5±0.8	7.5±0.8	10.0±0.8	10.0±0.8	10.0±0.8	
	Δ h	0±2.0	0±2.0	0±2.0	0±2.0	0±2.0	
	W	18.0+ 1.5/- 1.0	18.0 + 1.5/- 1.0	18.0 + 1.5/- 1.0	18.0 + 1.5/- 1.0	18.0 + 1.5/- 1.0	
	Wo	10.5 Max	10.5 Max	10.5 Max	10.5 Max	10.5 Max	
	W1	9.0+0.75/-0.5	9.0+0.75/-0.5	9.0+0.75/-0.5	9.0+0.75/-0.5	9.0+0.75/-0.5	
	W2	3.0 Max	3.0 Max	3.0 Max	3.0 Max	3.0 Max	
	Do	4.0±0.2	4.0±0.2	4.0±0.2	4.0±0.2	4.0±0.2	
	H	20+ 1.5/- 1.0	20+ 1.5/- 1.0	20+ 1.5/- 1.0	20+ 1.5/- 1.0	20+ 1.5/- 1.0	
	Ho	16.5& 17.0& 19.0 + 1.5/- 1.0	16.5& 17.0& 19.0 + 1.5/- 1.0	16.5& 17.0& 19.0 + 1.5/- 1.0	16.5& 17.0& 19.0 + 1.5/- 1.0	16.5& 17.0& 19.0 + 1.5/- 1.0	
	L	Straight Lead	Crimped Lead	Straight Lead	Crimped Lead	Straight Lead	Crimped Lead
		11.0 Max	9.0 Max	11.0 Max	9.0 Max	11.0 Max	9.0 Max
	t 1	0.5±0.2	0.5±0.2	0.5±0.2	0.5±0.2	0.5±0.2	
	t 2	1.7 Max	1.7 Max	1.7 Max	1.7 Max	1.7 Max	