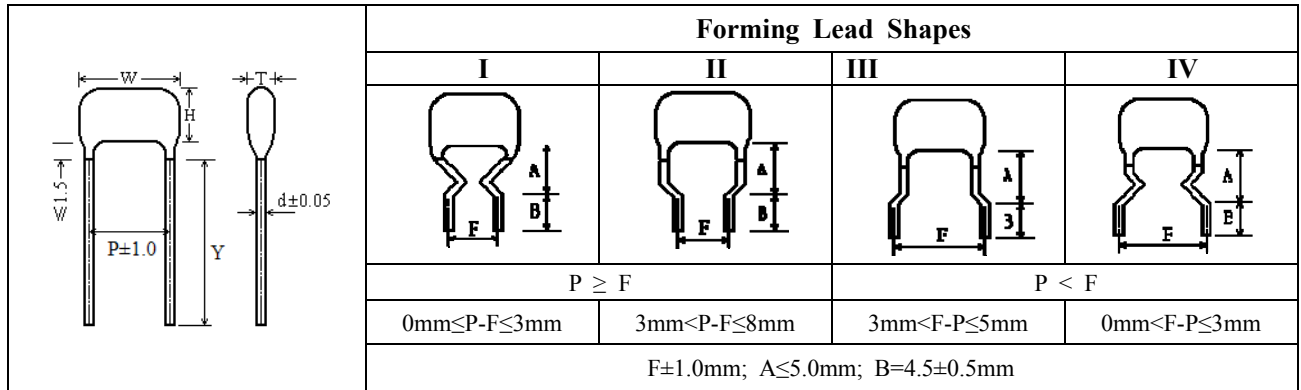


外形图 Outline Drawing



特点

- 金属化聚酯膜，无感卷绕结构
- 容量范围宽，体积小，重量轻
- 自愈性好，寿命长
- 阻燃性环氧粉末封装

主要用途

- 适用于直流和 VHF 级信号的隔直流、旁路和耦合
- 广泛应用于滤波、低脉冲电路

Features

- Metallized polyester film, non-inductive wound construction
- Wide capacitance range, small size and light weight
- Long life due to self-healing effect
- Flame retardation epoxy resin powder coated

Typical Applications

- Suitable for blocking, by-pass and coupling of DC and signals to VHF range
- Widely used in filter and low pulse circuits

技术要求 Specifications

引用标准 Reference Standard	GB/T 7332 (IEC 60384-2)		
气候类别 Climatic Category	55/105/21		
额定温度 Rated temperature	85°C		
工作温度范围 Operating temperature range	-55°C~105°C (+85°C to +105°C: decreasing factor 1.25% per °C for VR(dc))		
额定电压 Rated Voltage	50/63V, 100V, 250V, 400V, 630V		
电容量范围 Capacitance Range	0.010μF ~ 10.0μF		
电容量偏差 Capacitance Tolerance	±5%(J), ±10%(K), ±20%(M)		
耐电压 Voltage Proof	1.6U _R (5s)		
损耗角正切 Dissipation Factor	≤1.0% (20°C, 1kHz)		
绝缘电阻 Insulation Resistance	UR≤100V	≥15 000MΩ, C _R ≤0.33μF; ≥5 000s, C _R >0.33μF	(20°C, 10V, 1min)
	UR>100V	≥30 000MΩ, C _R ≤0.33μF; ≥10 000s, C _R >0.33μF:	(20°C, 100V, 1min)

产品编码说明 Part number system

■ 18位 产品代码说明如下:

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
W	1	6															

- Digit 1 to 3 系列代码 Series code
W16= CL21
- Digit 4 to 5 直流额定电压 DC rated voltage
1H=50V 1J=63V 2A=100V
2E=250V 2G=400V 2J=630V
- Digit 6 to 8 标称容量 Rated capacitance value
例如 For example: 103=10×10³pF=0.01μF
- Digit 9 容量偏差 Capacitance tolerance
J=±5%,K=±10%, M=±20%
- Digit 10 引线脚距 P Pitch
3=7.5mm 4=10.0mm 5=12.5mm
6=15.0mm 8=20.0mm A=25.0mm
B=27.5mm C=30.0mm E=35.0mm
- Digit 11 内部特征码 Internal use
A= Pattern III
S= Pattern II
- Digit 12 to 15 引线加工和包装代码 Lead form and packaging code
- Digit 16 to 18 内部特征码 Internal use

Table 1 引线加工和包装代码 Lead form and packaging code

第 12 位 Digit 12		第 13 位 Digit 13		第 14 位 Digit 14		第 15 位 Digit 15			
代码 code	说明 explanation	代码 code	说明 explanation	代码 code	说明 explanation	代码 code	说明 explanation		
A	弹带包装 ammo-pack	2	F=5.0mm	1	表示弯脚 kinked	A	产品在连续的两个载带孔之间 each cap. between two consecutive holes P3=12.7mm,H=20.0mm (For pitch=5.0/7.5mm)		
		3	F=7.5mm			E		P3=25.4mm;H=20.0mm (For pitch=10.0/15mm)	
4	F=10.0mm	0	B=4.5mm (the length of B)			0	B 的长度偏差±0.5mm B Length tolerance ±0.5mm		
6	F=15.0mm								
F	引线成型 lead kinked	2	F=5.0mm	0	B=4.5mm (the length of B)	0	B 的长度偏差±0.5mm B Length tolerance ±0.5mm		
Y	直脚 straight lead “Y” in the figure above	code	说明 explanation					0	长度偏差±0.5mm Length tolerance ±0.5mm
		45	引线长度 4.5mm lead length 4.5mm						

第 12-15 位代码“C000”表示标准的引线长度(20mm ~ 30mm)
Digit 12-15 code “C000” means standard lead length (20mm ~ 30mm)

■外形尺寸 Dimensions (mm)

Pattern III (Reduced sizes, Recommended design)

50Vdc (30Vac)/63Vdc (40Vac) #						
C (μ F)	W max	H max	T max	P	d	Part number
0.12	9.8	7.0	4.0	7.5	0.6	W161J124-3A*****
0.15	9.8	7.8	4.1	7.5	0.6	W161J154-3A*****
0.18	9.8	7.5	3.9	7.5	0.6	W161J184-3A*****
0.22	9.8	7.8	4.1	7.5	0.6	W161J224-3A*****
0.27	9.8	8.1	4.5	7.5	0.6	W161J274-3A*****
0.33	9.8	7.7	4.1	7.5	0.6	W161J334-3A*****
0.39	9.8	8.0	4.3	7.5	0.6	W161J394-3A*****
0.47	9.8	8.3	4.6	7.5	0.6	W161J474-3A*****
0.56	9.8	8.6	5.0	7.5	0.6	W161J564-3A*****
0.68	9.8	9.0	5.4	7.5	0.6	W161J684-3A*****
0.82	12.3	8.6	5.0	10.0	0.6	W161J824-4A*****
1.0	12.3	9.0	5.4	10.0	0.6	W161J105-4A*****
1.2	12.3	9.5	5.9	10.0	0.6	W161J125-4A*****
1.5	12.3	10.1	6.5	10.0	0.6	W161J155-4A*****
1.8	12.3	10.7	7.1	10.0	0.6	W161J185-4A*****
2.2	17.5	11.4	6.1	15.0	0.6	W161J225-6A*****
2.7	17.5	11.9	6.7	15.0	0.6	W161J275-6A*****
3.3	17.5	12.5	7.3	15.0	0.6	W161J335-6A*****
3.9	17.5	13.6	7.9	15.0	0.8	W161J395-6A*****
4.7	25.2	13.9	6.6	22.5	0.8	W161J475-9A*****
5.6	25.2	14.4	7.2	22.5	0.8	W161J565-9A*****
6.8	25.2	15.1	7.8	22.5	0.8	W161J685-9A*****
8.2	25.2	15.9	9.1	22.5	0.8	W161J825-9A*****
10.0	25.2	16.7	10.0	22.5	0.8	W161J106-9A*****

100 Vdc (63Vac)						
C (μ F)	W max	H max	T max	P	d	Part number
0.12	9.8	7.0	4.0	7.5	0.6	W162A124-3A*****
0.15	9.8	7.8	4.1	7.5	0.6	W162A154-3A*****
0.18	9.8	7.5	3.9	7.5	0.6	W162A184-3A*****
0.22	9.8	7.8	4.1	7.5	0.6	W162A224-3A*****
0.27	9.8	8.1	4.5	7.5	0.6	W162A274-3A*****
0.33	9.8	8.5	4.8	7.5	0.6	W162A334-3A*****
0.39	9.8	8.8	5.2	7.5	0.6	W162A394-3A*****
0.47	9.8	9.2	5.6	7.5	0.6	W162A474-3A*****
0.56	12.3	8.8	5.2	10.0	0.6	W162A564-4A*****
0.68	12.3	9.3	5.6	10.0	0.6	W162A684-4A*****
0.82	12.3	9.7	6.1	10.0	0.6	W162A824-4A*****
1.0	12.3	10.3	6.6	10.0	0.6	W162A105-4A*****
1.2	12.3	10.9	7.2	10.0	0.6	W162A125-4A*****
1.5	12.3	11.6	8.0	10.0	0.6	W162A155-4A*****
1.8	17.5	13.6	6.3	15.0	0.6	W162A185-6A*****
2.2	17.5	14.2	6.9	15.0	0.8	W162A225-6A*****
2.7	17.5	14.9	7.6	15.0	0.8	W162A275-6A*****
3.3	17.5	15.7	8.4	15.0	0.8	W162A335-6A*****
3.9	17.5	16.4	9.1	15.0	0.8	W162A395-6A*****
4.7	25.2	16.5	7.6	22.5	0.8	W162A475-9A*****
5.6	25.2	17.2	8.3	22.5	0.8	W162A565-9A*****
6.8	25.2	18.0	9.7	22.5	0.8	W162A685-9A*****
8.2	25.2	19.0	10.6	22.5	0.8	W162A825-9A*****
10.0	25.2	21.0	11.1	22.5	0.8	W162A106-9A*****

- Note:
- “-”表示容量偏差。
“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%
 - “****”表示引线加工和包装代码(见 table1)。
“****”=lead form and packing code (refer to table 1).
 - “#”当额定电压时 50VDC 时,第 4~5 位是 1H。
“#” when the rated voltage is 50VDC,the digit 4~5 is 1H.

■外形尺寸 Dimensions (mm)

250Vdc (160Vac)						
C (μ F)	W max	H max	T max	P	d	Part number
0.010	9.8	6.5	3.5	7.5	0.6	W162E103-3A*****
0.012	9.8	6.7	3.7	7.5	0.6	W162E123-3A*****
0.015	9.8	7.4	3.8	7.5	0.6	W162E153-3A*****
0.018	9.8	7.6	4.0	7.5	0.6	W162E183-3A*****
0.022	9.8	7.4	3.8	7.5	0.6	W162E223-3A*****
0.027	9.8	7.7	4.1	7.5	0.6	W162E273-3A*****
0.033	9.8	7.3	3.7	7.5	0.6	W162E333-3A*****
0.039	9.8	7.5	3.9	7.5	0.6	W162E393-3A*****
0.047	9.8	7.8	4.1	7.5	0.6	W162E473-3A*****
0.056	9.8	8.0	4.4	7.5	0.6	W162E563-3A*****
0.068	9.8	7.5	3.9	7.5	0.6	W162E683-3A*****
0.082	9.8	7.8	4.1	7.5	0.6	W162E823-3A*****
0.10	9.8	8.1	4.4	7.5	0.6	W162E104-3A*****
0.12	9.8	8.4	4.8	7.5	0.6	W162E124-3A*****
0.15	9.8	8.8	5.2	7.5	0.6	W162E154-3A*****
0.18	12.3	8.9	4.5	10.0	0.6	W162E184-4A*****
0.22	12.3	9.3	4.8	10.0	0.6	W162E224-4A*****
0.27	12.3	9.7	5.3	10.0	0.6	W162E274-4A*****
0.33	12.3	10.7	5.5	10.0	0.6	W162E334-4A*****
0.39	17.5	10.4	5.2	15.0	0.6	W162E394-6A*****
0.47	17.5	10.8	5.6	15.0	0.6	W162E474-6A*****
0.56	17.5	12.3	5.5	15.0	0.6	W162E564-6A*****
0.68	17.5	12.8	6.0	15.0	0.6	W162E684-6A*****
0.82	17.5	13.8	6.5	15.0	0.6	W162E824-6A*****
1.0	17.5	14.4	7.1	15.0	0.6	W162E105-6A*****
1.2	17.5	15.0	7.7	15.0	0.8	W162E125-6A*****
1.5	17.5	15.9	9.1	15.0	0.8	W162E155-6A*****
1.8	17.5	16.2	9.9	15.0	0.8	W162E185-6A*****
2.2	25.2	15.6	8.8	22.5	0.8	W162E225-9A*****
2.7	25.2	16.5	9.7	22.5	0.8	W162E275-9A*****
3.3	25.2	17.4	10.6	22.5	0.8	W162E335-9A*****
3.9	25.2	19.2	10.9	22.5	0.8	W162E395-9A*****
4.7	25.2	20.3	11.9	22.5	0.8	W162E475-9A*****
5.6	30.2	19.9	11.6	27.5	0.8	W162E565-BA*****
6.8	30.2	21.1	12.8	27.5	0.8	W162E685-BA*****
8.2	30.2	22.4	14.0	27.5	0.8	W162E825-BA*****
10.0	30.2	23.9	15.5	27.5	0.8	W162E106-BA*****

400 Vdc (200Vac)						
C (μ F)	W max	H max	T max	P	d	Part number
0.010	9.8	6.9	3.9	7.5	0.6	W162G103-3A*****
0.012	9.8	7.1	4.1	7.5	0.6	W162G123-3A*****
0.015	9.8	7.5	4.4	7.5	0.6	W162G153-3A*****
0.018	9.8	7.3	3.7	7.5	0.6	W162G183-3A*****
0.022	9.8	7.5	3.9	7.5	0.6	W162G223-3A*****
0.027	9.8	7.8	4.2	7.5	0.6	W162G273-3A*****
0.033	9.8	8.1	4.5	7.5	0.6	W162G333-3A*****
0.039	9.8	8.2	4.6	7.5	0.6	W162G393-3A*****
0.047	9.8	8.6	4.9	7.5	0.6	W162G473-3A*****
0.056	12.3	8.8	4.3	10.0	0.6	W162G563-4A*****
0.068	12.3	9.1	4.7	10.0	0.6	W162G683-4A*****
0.082	12.3	9.4	5.0	10.0	0.6	W162G823-4A*****
0.10	12.3	9.9	5.4	10.0	0.6	W162G104-4A*****
0.12	12.3	10.3	5.9	10.0	0.6	W162G124-4A*****
0.15	17.5	10.6	5.4	15.0	0.6	W162G154-6A*****
0.18	17.5	11.0	5.8	15.0	0.6	W162G184-6A*****
0.22	17.5	11.5	6.3	15.0	0.6	W162G224-6A*****
0.27	17.5	12.0	6.8	15.0	0.6	W162G274-6A*****
0.33	17.5	12.7	7.4	15.0	0.6	W162G334-6A*****
0.39	17.5	13.7	8.0	15.0	0.8	W162G394-6A*****
0.47	17.5	14.4	9.2	15.0	0.8	W162G474-6A*****
0.56	17.5	15.1	9.9	15.0	0.8	W162G564-6A*****
0.68	17.5	16.0	10.8	15.0	0.8	W162G684-6A*****
0.82	17.5	17.0	11.8	15.0	0.8	W162G824-6A*****
1.0	25.2	17.5	9.1	22.5	0.8	W162G105-9A*****
1.2	25.2	18.3	9.9	22.5	0.8	W162G125-9A*****
1.5	25.2	19.4	11.0	22.5	0.8	W162G155-9A*****
1.8	30.2	19.1	10.8	27.5	0.8	W162G185-BA*****
2.2	30.2	21.2	11.3	27.5	0.8	W162G225-BA*****
2.7	30.2	22.4	12.5	27.5	0.8	W162G275-BA*****
3.3	30.2	23.8	13.9	27.5	0.8	W162G335-BA*****
3.9	30.2	25.1	15.1	27.5	0.8	W162G395-BA*****
4.7	30.2	26.6	16.7	27.5	0.8	W162G475-BA*****

- Note: 1. “-”表示容量偏差。
“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%
2. “****”表示引线加工和包装代码(见 table1)。
“****”=lead form and packing code (refer to table 1).

■外形尺寸 Dimensions (mm)

630Vdc (220Vac) [@]						
C (μF)	W max	H max	T max	P	d	Part number
0.010	12.3	7.4	3.8	10.0	0.6	W162J103-4A****+++
0.012	12.3	7.6	4.0	10.0	0.6	W162J123-4A****+++
0.015	12.3	7.7	4.0	10.0	0.6	W162J153-4A****+++
0.018	12.3	7.9	4.2	10.0	0.6	W162J183-4A****+++
0.022	12.3	8.2	4.5	10.0	0.6	W162J223-4A****+++
0.027	12.3	8.5	4.9	10.0	0.6	W162J273-4A****+++
0.033	12.3	8.9	5.2	10.0	0.6	W162J333-4A****+++
0.039	12.3	9.2	5.6	10.0	0.6	W162J393-4A****+++
0.047	12.3	9.7	6.0	10.0	0.6	W162J473-4A****+++
0.056	12.3	10.1	6.5	10.0	0.6	W162J563-4A****+++
0.068	12.3	10.7	7.0	10.0	0.6	W162J683-4A****+++
0.082	12.3	11.3	7.6	10.0	0.6	W162J823-4A****+++
0.10	17.5	11.5	6.3	15.0	0.6	W162J104-6A****+++
0.12	17.5	12.0	6.8	15.0	0.6	W162J124-6A****+++
0.15	17.5	12.7	7.5	15.0	0.8	W162J154-6A****+++
0.18	17.5	13.8	8.1	15.0	0.8	W162J184-6A****+++
0.22	17.5	14.5	9.3	15.0	0.8	W162J224-6A****+++
0.27	17.5	15.4	10.2	15.0	0.8	W162J274-6A****+++
0.33	17.5	16.3	11.1	15.0	0.8	W162J334-6A****+++
0.39	17.5	17.2	12.0	15.0	0.8	W162J394-6A****+++
0.47	25.2	16.4	9.7	22.5	0.8	W162J474-9A****+++
0.56	25.2	17.2	10.5	22.5	0.8	W162J564-9A****+++
0.68	25.2	18.2	11.4	22.5	0.8	W162J684-9A****+++
0.82	25.2	19.3	12.5	22.5	0.8	W162J824-9A****+++
1.0	30.2	19.9	11.6	27.5	0.8	W162J105-BA****+++
1.2	30.2	22.0	12.6	27.5	0.8	W162J125-BA****+++
1.5	30.2	22.5	14.1	27.5	0.8	W162J155-BA****+++
1.8	30.2	23.8	15.5	27.5	0.8	W162J185-BA****+++
2.2	30.2	25.5	17.1	27.5	0.8	W162J225-BA****+++

- Note: 1. “-”表示容量偏差。
“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%
2. “****”表示引线加工和包装代码。
“****”=lead form and packing code (refer to table 1).
3. “@” Not suitable for across-the-line applications. Pls refer to the Interference Suppression Capacitors.

■ 外形尺寸Dimensions (mm)

Pattern II (Not for new design, Please use Pattern III instead)

50Vdc (30Vac)/63Vdc (40Vac)/100 Vdc (63Vac)#						
C (μ F)	W max	H max	T max	P	d	Part number
0.010	10.0	9.0	5.5	7.5	0.6	W162A103-3S*****
0.012	10.0	9.0	5.5	7.5	0.6	W162A123-3S*****
0.015	10.0	9.5	6.0	7.5	0.6	W162A153-3S*****
0.018	10.0	10.0	6.0	7.5	0.6	W162A183-3S*****
0.022	10.0	9.0	5.5	7.5	0.6	W162A223-3S*****
0.027	10.0	9.5	6.0	7.5	0.6	W162A273-3S*****
0.033	10.0	8.5	5.0	7.5	0.6	W162A333-3S*****
0.039	10.0	9.0	5.0	7.5	0.6	W162A393-3S*****
0.047	10.0	9.0	5.5	7.5	0.6	W162A473-3S*****
0.056	10.0	9.5	6.0	7.5	0.6	W162A563-3S*****
0.068	10.0	9.0	5.5	7.5	0.6	W162A683-3S*****
0.082	10.0	9.5	6.0	7.5	0.6	W162A823-3S*****
0.10	10.0	8.5	5.0	7.5	0.6	W162A104-3S*****
0.12	10.0	8.5	5.0	7.5	0.6	W162A124-3S*****
0.15	10.0	8.5	5.0	7.5	0.6	W162A154-3S*****
0.18	10.0	9.0	5.5	7.5	0.6	W162A184-3S*****
0.22	10.0	9.5	5.5	7.5	0.6	W162A224-3S*****
0.27	10.0	10.0	6.5	7.5	0.6	W162A274-3S*****
0.33	13.0	10.5	6.0	10.0	0.6	W162A334-4S*****
0.39	13.0	11.0	6.0	10.0	0.6	W162A394-4S*****
0.47	13.0	11.5	6.5	10.0	0.6	W162A474-4S*****
0.56	13.0	12.0	7.0	10.0	0.6	W162A564-4S*****
0.68	19.0	11.5	6.0	15.0	0.6	W162A684-6S*****
0.82	19.0	12.5	6.5	15.0	0.6	W162A824-6S*****
1.0	19.0	12.5	7.0	15.0	0.8	W162A105-6S*****
1.2	19.0	13.5	7.5	15.0	0.8	W162A125-6S*****
1.5	19.0	14.0	8.5	15.0	0.8	W162A155-6S*****
1.8	19.0	14.5	9.0	15.0	0.8	W162A185-6S*****
2.2	24.0	14.5	8.5	20.0	0.8	W162A225-8S*****
2.7	24.0	15.0	8.5	20.0	0.8	W162A275-8S*****
3.3	24.0	16.0	9.5	20.0	0.8	W162A335-8S*****
3.9	24.0	17.0	10.0	20.0	0.8	W162A395-8S*****
4.7	29.0	17.0	10.0	25.0	0.8	W162A475-AS*****
5.6	29.0	17.5	10.5	25.0	0.8	W162A565-AS*****
6.8	29.0	18.5	11.5	25.0	0.8	W162A685-AS*****
8.2	29.0	19.5	12.5	25.0	0.8	W162A825-AS*****
10.0	29.0	21.0	14.0	25.0	0.8	W162A106-AS*****

250 Vdc (160Vac)						
C (μ F)	W max	H max	T max	P	d	Part number
0.010	10.0	9.0	5.5	7.5	0.6	W162E103-3S*****
0.012	10.0	9.0	5.5	7.5	0.6	W162E123-3S*****
0.015	10.0	9.5	6.0	7.5	0.6	W162E153-3S*****
0.018	10.0	10.0	6.0	7.5	0.6	W162E183-3S*****
0.022	10.0	9.5	5.5	7.5	0.6	W162E223-3S*****
0.027	10.0	9.5	6.0	7.5	0.6	W162E273-3S*****
0.033	10.0	8.5	5.0	7.5	0.6	W162E333-3S*****
0.039	10.0	9.0	5.0	7.5	0.6	W162E393-3S*****
0.047	10.0	9.0	5.5	7.5	0.6	W162E473-3S*****
0.056	10.0	9.5	6.0	7.5	0.6	W162E563-3S*****
0.068	10.0	9.0	5.5	7.5	0.6	W162E683-3S*****
0.082	10.0	9.5	6.0	7.5	0.6	W162E823-3S*****
0.10	10.0	10.0	6.0	7.5	0.6	W162E104-3S*****
0.12	10.0	10.0	6.5	7.5	0.6	W162E124-3S*****
0.15	10.0	10.5	6.5	7.5	0.6	W162E154-3S*****
0.18	13.0	10.0	6.0	10.0	0.6	W162E184-4S*****
0.22	13.0	11.0	6.5	10.0	0.6	W162E224-4S*****
0.27	13.0	11.5	7.0	10.0	0.6	W162E274-4S*****
0.33	13.0	12.5	7.0	10.0	0.6	W162E334-4S*****
0.39	19.0	11.5	6.0	15.0	0.6	W162E394-6S*****
0.47	19.0	12.0	6.5	15.0	0.8	W162E474-6S*****
0.56	19.0	12.0	7.0	15.0	0.8	W162E564-6S*****
0.68	19.0	13.0	7.5	15.0	0.8	W162E684-6S*****
0.82	19.0	13.5	8.5	15.0	0.8	W162E824-6S*****
1.0	19.0	14.0	9.0	15.0	0.8	W162E105-6S*****
1.2	24.0	13.5	8.5	20.0	0.8	W162E125-8S*****
1.5	24.0	14.0	9.0	20.0	0.8	W162E155-8S*****
1.8	24.0	16.0	9.5	20.0	0.8	W162E185-8S*****
2.2	24.0	17.0	10.0	20.0	0.8	W162E225-8S*****
2.7	24.0	18.0	11.5	20.0	0.8	W162E275-8S*****
3.3	29.0	18.0	11.5	25.0	0.8	W162E335-AS*****
3.9	29.0	18.5	11.5	25.0	0.8	W162E395-AS*****
4.7	29.0	20.0	13.0	25.0	0.8	W162E475-AS*****
5.6	34.0	19.5	12.5	30.0	0.8	W162E565-CS*****
6.8	34.0	21.5	13.5	30.0	0.8	W162E685-CS*****
8.2	34.0	23.0	14.5	30.0	0.8	W162E825-CS*****
10.0	34.0	24.5	16.0	30.0	0.8	W162E106-CS*****

Note: 1. “-”表示容量偏差。

“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%

2. “*****”表示引线加工和包装代码。“*****”=lead form and packing code (refer to table 1).

3. “#”表示当额定电压时 50VDC, 63VDC 时第 4~5 位是 1H,1J“#” when the rated voltage is 50VDC, 63VDC,the digit 4~5 is 1H, 1J

■ 外形尺寸Dimensions (mm)

Pattern II (Not for new design, Please use Pattern III instead)

400Vdc (200Vac)						
C (μF)	W max	H max	T max	P	d	Part number
0.010	10.0	9.0	5.5	7.5	0.6	W162G103-3S*****
0.012	10.0	9.0	5.5	7.5	0.6	W162G123-3S*****
0.015	10.0	9.5	6.0	7.5	0.6	W162G153-3S*****
0.018	10.0	10.0	6.0	7.5	0.6	W162G183-3S*****
0.022	10.0	9.5	5.5	7.5	0.6	W162G223-3S*****
0.027	10.0	9.5	6.0	7.5	0.6	W162G273-3S*****
0.033	10.0	10.0	6.0	7.5	0.6	W162G333-3S*****
0.039	10.0	10.5	6.5	7.5	0.6	W162G393-3S*****
0.047	10.0	10.5	7.0	7.5	0.6	W162G473-3S*****
0.056	13.0	10.5	6.0	10.0	0.6	W162G563-4S*****
0.068	13.0	11.0	6.5	10.0	0.6	W162G683-4S*****
0.082	13.0	11.5	7.0	10.0	0.6	W162G823-4S*****
0.10	13.0	12.0	7.0	10.0	0.6	W162G104-4S*****
0.12	13.0	12.5	8.0	10.0	0.6	W162G124-4S*****
0.15	19.0	11.5	7.0	15.0	0.6	W162G154-6S*****
0.18	19.0	12.0	7.5	15.0	0.6	W162G184-6S*****
0.22	19.0	13.0	8.0	15.0	0.6	W162G224-6S*****
0.27	19.0	13.5	9.0	15.0	0.6	W162G274-6S*****
0.33	19.0	14.5	9.5	15.0	0.8	W162G334-6S*****
0.39	19.0	15.0	9.5	15.0	0.8	W162G394-6S*****
0.47	19.0	16.0	10.5	15.0	0.8	W162G474-6S*****
0.56	24.0	15.0	9.5	20.0	0.8	W162G564-8S*****
0.68	24.0	16.0	10.5	20.0	0.8	W162G684-8S*****
0.82	24.0	17.0	11.5	20.0	0.8	W162G824-8S*****
1.0	29.0	17.0	10.5	25.0	0.8	W162G105-AS*****
1.2	29.0	18.0	11.5	25.0	0.8	W162G125-AS*****
1.5	29.0	19.5	12.5	25.0	0.8	W162G125-AS*****
1.8	34.0	21.0	12.0	30.0	0.8	W162G185-CS*****
2.2	34.0	21.5	13.5	30.0	0.8	W162G225-CS*****
2.7	34.0	23.0	14.5	30.0	0.8	W162G275-CS*****
3.3	34.0	24.5	16.5	30.0	0.8	W162G335-CS*****
3.9	34.0	26.0	17.5	30.0	0.8	W162G395-CS*****
4.7	34.0	28.0	19.5	30.0	0.8	W162G475-CS*****

630 Vdc (220Vac) [@]						
C (μF)	W max	H max	T max	P	d	Part number
0.010	13.0	9.0	5.0	10.0	0.6	W162J103-4S*****
0.012	13.0	9.0	5.0	10.0	0.6	W162J123-4S*****
0.015	13.0	9.5	5.5	10.0	0.6	W162J153-4S*****
0.018	13.0	10.0	6.0	10.0	0.6	W162J183-4S*****
0.022	13.0	10.0	6.0	10.0	0.6	W162J223-4S*****
0.027	13.0	10.5	6.5	10.0	0.6	W162J273-4S*****
0.033	13.0	11.0	7.0	10.0	0.6	W162J333-4S*****
0.039	13.0	11.5	7.0	10.0	0.6	W162J393-4S*****
0.047	16.0	12.0	7.0	12.5	0.6	W162J473-5S*****
0.056	16.0	12.0	7.5	12.5	0.6	W162J563-5S*****
0.068	16.0	12.5	8.0	12.5	0.6	W162J683-5S*****
0.082	16.0	13.0	8.5	12.5	0.6	W162J823-5S*****
0.10	19.0	13.0	8.0	15.0	0.8	W162J104-6S*****
0.12	19.0	13.5	9.0	15.0	0.8	W162J124-6S*****
0.15	19.0	14.0	9.5	15.0	0.8	W162J154-6S*****
0.18	19.0	15.0	10.0	15.0	0.8	W162J184-6S*****
0.22	19.0	16.0	11.0	15.0	0.8	W162J224-6S*****
0.27	24.0	16.0	9.5	20.0	0.8	W162J274-8S*****
0.33	24.0	17.0	10.0	20.0	0.8	W162J334-8S*****
0.39	24.0	18.0	11.0	20.0	0.8	W162J394-8S*****
0.47	29.0	18.0	10.0	25.0	0.8	W162J474-AS*****
0.56	29.0	19.0	10.5	25.0	0.8	W162J564-AS*****
0.68	29.0	20.0	12.0	25.0	0.8	W162J684-AS*****
0.82	29.0	21.5	13.0	25.0	0.8	W162J824-AS*****
1.0	34.0	21.5	13.0	30.0	0.8	W162J105-CS*****
1.2	34.0	22.5	14.5	30.0	0.8	W162J125-CS*****
1.5	34.0	24.0	15.5	30.0	0.8	W162J155-CS*****
1.8	34.0	26.0	17.5	30.0	0.8	W162J185-CS*****
2.2	34.0	27.5	19.5	30.0	0.8	W162J225-CS*****

Note: 1. “-”表示容量偏差

“-”=capacitance tolerance code, M=±20%,K=±10%,J=±5%

2.“****”表示引线加工和包装代码。“****”=lead form and packing code (refer to table 1).

3. “@” Not suitable for across-the-line applications.Pls refer to the Interference Suppression Capacitors.

Maximum permissible voltage change per unit of time

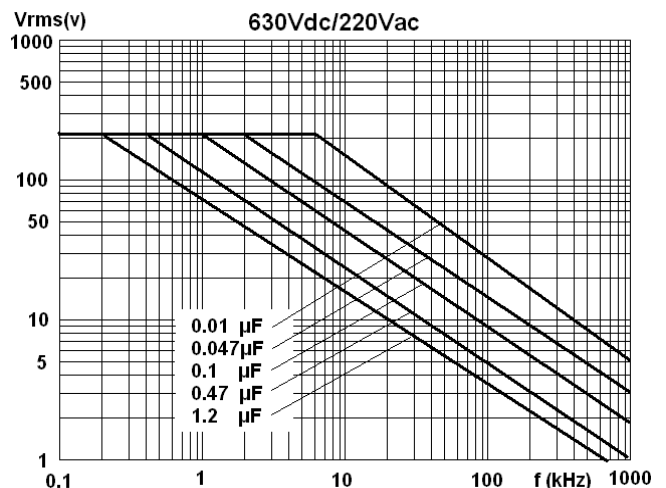
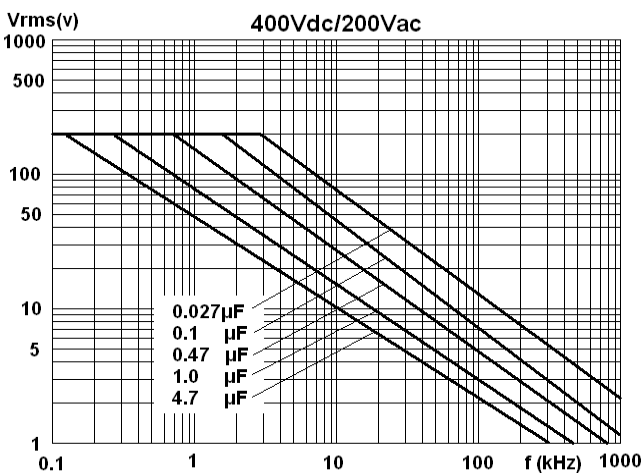
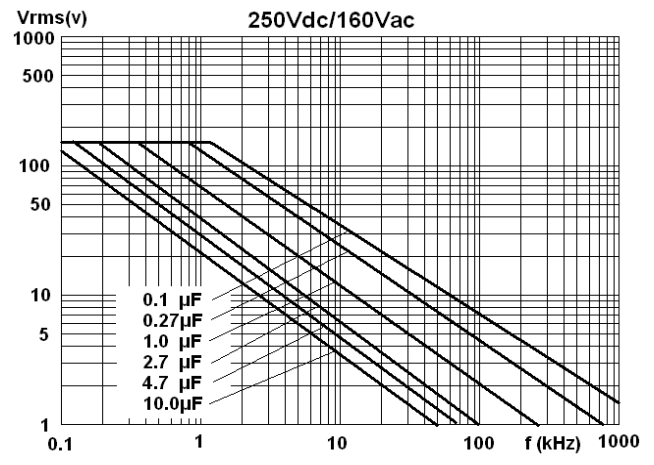
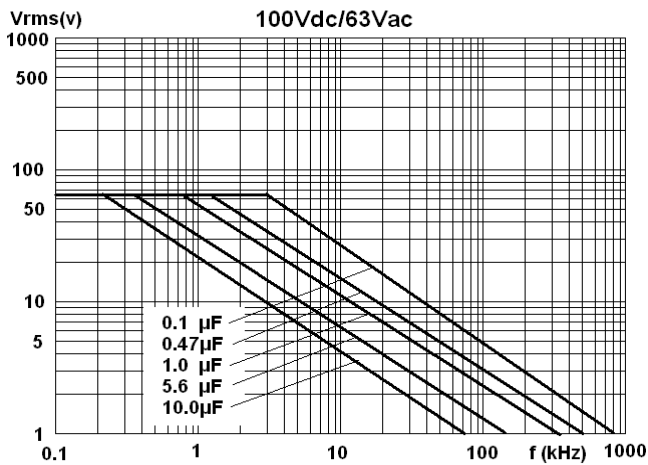
Pattern III

Rated Voltage(V)	dV/dt(V/us)					
	P=5mm	P=7.5mm	P=10mm	P=15mm	P=22.5mm	P=27.5mm
50/63	9	7.5	6	3	2	/
100	20	15	9	5	3	/
250	/	30	20	12	8	5
400	/	40	30	20	10	7
630	/	/	40	25	12	10

Note:

1. Rated voltage pulse slope $(dV/dt)_R$ at rated voltage.
2. If the working voltage(U) is lower than the rated voltage(U_R),the capacitor can be worked at a higher dV/dt. In this case, the maximum allowed dV/dt is obtain by multiplying the right value with U_R/U .

MAX. VOLTAGE($V_{r.m.s}$) VERSUS FREQUENCY

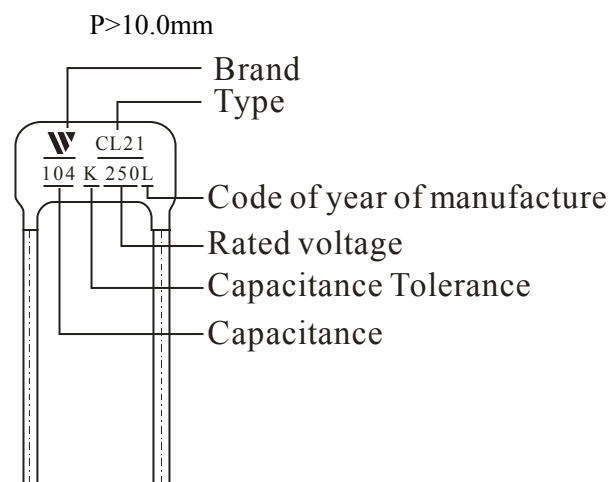
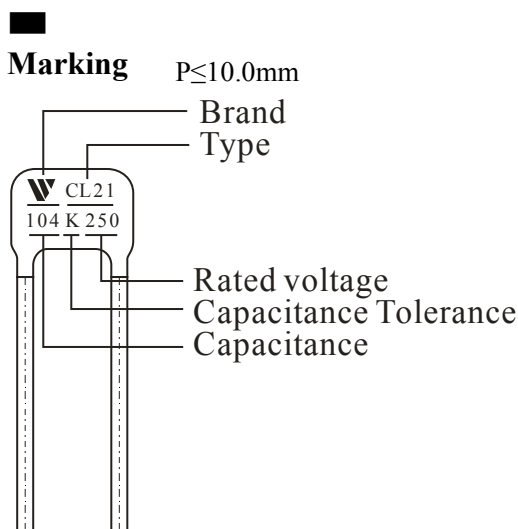


Note: sinusoidal wave-form、 environment temperature $\leq 85^\circ\text{C}$, internal temperature rise $\triangle T=15^\circ\text{C}$, p (pitch) in mm.

Test Method And Performance

No.	Item	Performance	Test method (IEC60384-2)
1	Solderability	Good quality of tinning	Solder temperature:245°C±5°C Immersion time: 2.0s±0.5s
2	Initial measurement	Capacitance Tgδ: 1kHz, C>1.0μF 10kHz, C≤1.0μF	
	Terminal strength	There shall be no visible damage	Ref. item 4.3 Tension: 0.6≤φd≤0.8mm, 10N φd=1.0mm, 20N Bend: 0.6≤φd≤0.8mm, 5N φd=1.0mm, 10N The terminals shall be bent 2 times in each direction.
	Resistance to solder heat	There shall be no visible damage	Solder temperature:260°C±5°C Immersion time: 10s±1s
	Final measurement	ΔC/C ≤±2%(relative to the initial value) Increase of tgδ: ≤0.005 (10kHz, C≤1.0μF) ≤0.003 (1kHz, C>1.0μF)	
3	Initial measurement	Capacitance Tgδ: 1kHz, C>1.0μF 10kHz, C≤1.0μF	
	Rapid change of temperature	There shall be no evidence of deterioration.	θ _A =-55°C, θ _B =+85°C 5 cycles, Duration: t=30min
	Vibration	There shall be no evidence of deterioration.	Amplitude 0.75mm or acceleration 98m/s ² (whichever is the smaller severity), f: 10Hz to 500Hz.Three directions, 2h foreach direction, total 6h.
	Bump	There shall be no evidence of deterioration.	4 000 times, Acceleration: 390m/s ² ,Pulse duration, 6ms
	Final measurement	ΔC/C ≤±5%(relative to the initial value) Increase of tgδ: ≤0.003 (10kHz, C≤1.0μF) ≤0.002 (1kHz, C>1.0μF) IR: ≥ 50% of the rated value	
4	climate sequence	Initial measurement	Capacitance Tgδ: 1kHz, C>1.0μF 10kHz, C≤1.0μF
		Dry heat	+85°C, 16h
		Damp heat, Cyclic	Test Db, Severity: b, the first cycle
		Cold	-55°C, 2h
		Low air pressure	There shall be no permanent breakdown, flashover or other harmful deformation when applying U _R at the last 1 minute. 15°C~35°C, 8.5kPa, 1h,
		Damp heat, cyclic other	Test Db, Severity b, the other cycles, Applying U _R for 1 minute after the test finished.

No.	Item		Performance	Test method (IEC60384-2)
4	climate sequence (continue)	Final measurement	There shall be no evidence of deterioration and the marking shall be legible. $\Delta C/C \leq \pm 5\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.005 (10kHz, $C \leq 1.0\mu\text{F}$) ≤ 0.003 (1kHz, $C > 1.0\mu\text{F}$) IR: $\geq 50\%$ of the rated value	
5	Damp heat steady state		There shall be no evidence of deterioration and the marking shall be legible. $\Delta C/C \leq \pm 5\%$ (relative to the initial value) Increase of $\text{tg}\delta \leq 0.005$ IR: $\geq 50\%$ of the rated value	Temperature: $40^\circ\text{C} \pm 2^\circ\text{C}$ Humidity: $93 \begin{smallmatrix} +2 \\ -3 \end{smallmatrix} \% \text{RH}$ Duration: 21 days
6	Endurance		$\Delta C/C \leq \pm 8\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.003 (10kHz, $C \leq 1.0\mu\text{F}$) ≤ 0.002 (1kHz, $C > 1.0\mu\text{F}$) IR: $\geq 50\%$ of the rated value	Temperature: $+85^\circ\text{C}$ Voltage: $1.25 \times U_R$ Duration: 2 000h
7	Charging and discharging		$\Delta C/C \leq \pm 5\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.003 (10kHz, $C \leq 1.0\mu\text{F}$) ≤ 0.002 (1kHz, $C > 1.0\mu\text{F}$) IR: $\geq 50\%$ of the rated value	Times: 10 000 Duration of charging: 0.5s Duration of discharging: 0.5s Charging voltage: rated voltage Charging resistance: $220/C_R(\Omega)$ Discharging resistance: $R = 10/C_R(\Omega)$ or 20Ω (whichever is the greater) C_R : rated capacitance (μF)



■ Taping for dipped-type capacitor

▲ Outline Drawing

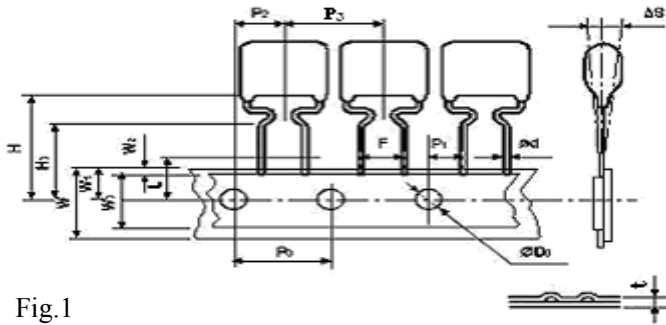


Fig.1

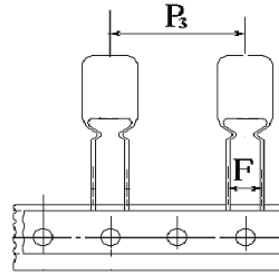


Fig 2

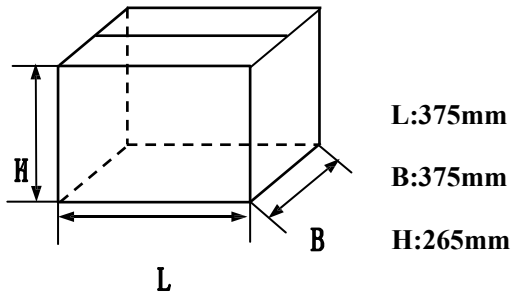
▲ Taping Dimensions(mm)

Technology index title	代号	尺寸(mm)				误差
		P=5.0	P=7.5	P=10.0	P=15.0	
Taping type	—	Fig 1	Fig 1	Fig 2	Fig 2	—
Part number Digit12-15	Ammo-pack	A21A	A31A	A41E	A61E	
Taping pitch	P ₃	12.7	12.7	25.4	25.4	±1.0
Feed hole pitch	P ₀	12.7	12.7	12.7	12.7	±0.3
Center of wire	P ₁	3.85	2.60	7.7	5.2	±0.7
Center of body	P ₂	6.35	6.35	12.7	12.7	±1.3
Pitch of taping wire	F**	5.0	7.5	10.0	15.0	+0.8 -0.2
Component alignment	△ S	0	0	0	0	±2.0
Height of crangle from tape center	H	20.0	20.0	20.0	20.0	±1.0
Height of component from tape center	H ₀	16.0	16.0	16.0	16.0	±0.5
Carrier tape width	W	18.0	18.0	18.0	18.0	+1.0 -0.5
Hold down tape width	W ₀	13	13	13	13	±0.5
Hole position	W ₁	9.0	9.0	9.0	9.0	+0.75 -0.5
Hold down tape sition	W ₂	≤3	≤3	≤3	≤3	—
Feed hole dia.	D ₀	4.0	4.0	4.0	4.0	±0.3
Tape thickness	t	0.7	0.7	0.7	0.7	±0.2

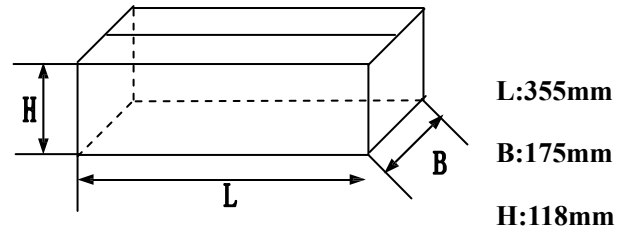
Note: * P₀=15mm is also available;
** F can be other lead spacing;

■ Packing box sizes

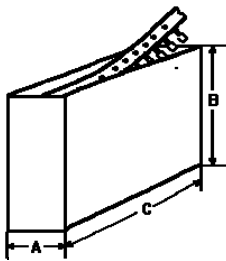
1. Out packing box for bulk



2. Inner packing box for bulk



3. Box sizes for Ammo-pack



A=48 ± 3; B=260 ± 3; C=330 ± 3