

外形图 Outline Drawing

	Forming Lead Shapes			
	I	II	III	IV
	$P \geq F$		$P < F$	
	$0\text{mm} \leq P-F \leq 3\text{mm}$	$3\text{mm} < P-F \leq 8\text{mm}$	$3\text{mm} < F-P \leq 5\text{mm}$	$0\text{mm} < F-P \leq 3\text{mm}$
$F \pm 1.0\text{mm}; A \leq 5.0\text{mm}; B = 4.5 \pm 0.5\text{mm}$				

特点

- 金属化聚丙烯膜箔式，卷绕结构
- 损耗小，内部温升小
- 负电容量温度系数
- 阻燃环氧粉末包封（UL94/V-0）

主要用途

- 大屏幕显示器及彩电行逆程电路
- 适用于高脉冲，大电流电路
- 适用于电子镇流器

Features

- Metallized polypropylene film/foil, wound construction
- Low loss and small inherent temperature rise
- Negative temperature coefficient of capacitance
- Flame retardant epoxy resin powder coating (UL94/V-0)

Typical Applications

- Horizontal resonance circuits of large screen monitor and colour TV
- Suitable for high pulse and high current loading circuit
- Suitable for electronic ballast

技术要求 Specifications

引用标准 Reference Standard	GB/T 14579 (IEC 60384-17)
气候类别 Climatic Category	40/105/21
额定温度 Rated Temperature	85°C
工作温度范围 Operating temperature Range	-40°C~105°C (+85°C to +105°C: decreasing factor 1.25% per °C for $V_R(\text{dc})$)
额定电压 Rated Voltage	630V, 800V, 1 000/1 250V, 1 600V, 2 000V, 2 500V
电容量范围 Capacitance Range	0.0010μF ~ 0.10μF
电容量偏差 Capacitance Tolerance	±3%(H)、±5%(J)、±10%(K)
耐电压 Voltage Proof	1.75 U_R (5s)
损耗角正切 Dissipation Factor	$\leq 10 \times 10^{-4}$ (1kHz, 20°C) $\leq 20 \times 10^{-4}$ (10kHz, 20°C)
绝缘电阻 Insulation Resistance	$\geq 50\ 000\ \text{M}\Omega$ (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:

CBB81

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

- Digit 1 to 3 系列代码 Series code
W25=CBB81
- Digit 4 to 5 直流额定电压 DC Rated voltage
2J=630V 2K=800V 3A=1000V 3L=1200V
3B=1250V 3C=1600V 3D=2000V 3E=2500V
- Digit 6 to 8 标称容量 Rated capacitance value
例如 For example : 103=10×10³ pF= 0.01μf
- Digit 9 容量偏差 Capacitance tolerance
H=±3%, J=±5%, K=±10%
- Digit 10 引线脚距 Pitch
6=15.0mm 8=19.0mm 9=22.0mm
A=25.0mm B=27.0mm
- Digit 11 内部特征代码 Internal use
S 代表 CBB81 II 型 S=CBB81 Pattern II
- Digit 12 to 15 引线加工和包装代码 Lead form and packaging code
- Digit 16 to 18 内部特征代码 Internal use

Table1 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	6	F=15.0mm	1	表示弯脚 kinked	E	P3=25.4mm;H=20.0mm (For pitch=15mm) (Detail parameter refer to page 16)
F	引线成型 lead kinked	6 7 8 9	F=15.0mm F=17.5mm F=20.0mm F=22.5mm	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	代码 code 45	说明 explanation lead length 4.5mm			0	Length tolerance ±0.5mm

第 12-15 位代码“C000”表示标准的引线长度(20mm ~ 30mm)
Digit12-15 code “C000”means standard lead length (20mm ~ 30mm)

■ 外形尺寸 Dimensions (mm)

Pattern II (Reduced sizes)

630/800Vdc (400Vac) [#]						
容量 C (μ F)	W max	H max	T max	P	d	产品代码 Part Number
0.0010	18.0	10.1	5.7	15.0	0.8	W252K102-6S****++
0.0012	18.0	10.5	6.0	15.0	0.8	W252K122-6S****++
0.0015	18.0	11.0	6.5	15.0	0.8	W252K152-6S****++
0.0016	18.0	11.6	6.4	15.0	0.8	W252K162-6S****++
0.0018	18.0	11.9	6.7	15.0	0.8	W252K182-6S****++
0.0020	18.0	12.2	7.0	15.0	0.8	W252K202-6S****++
0.0022	18.0	12.5	7.3	15.0	0.8	W252K222-6S****++
0.0024	18.0	12.7	7.5	15.0	0.8	W252K242-6S****++
0.0027	18.0	13.1	7.9	15.0	0.8	W252K272-6S****++
0.0030	18.0	13.5	8.3	15.0	0.8	W252K302-6S****++
0.0033	18.0	13.8	8.6	15.0	0.8	W252K332-6S****++
0.0036	18.0	11.7	6.5	15.0	0.8	W252K362-6S****++
0.0039	18.0	12.0	6.7	15.0	0.8	W252K392-6S****++
0.0043	18.0	12.2	7.0	15.0	0.8	W252K432-6S****++
0.0047	18.0	12.5	7.3	15.0	0.8	W252K472-6S****++
0.0049	18.0	11.9	6.7	15.0	0.8	W252K492-6S****++
0.0051	18.0	12.0	6.8	15.0	0.8	W252K512-6S****++
0.0053	18.0	12.1	6.9	15.0	0.8	W252K532-6S****++
0.0056	18.0	11.5	6.2	15.0	0.8	W252K562-6S****++
0.0060	18.0	11.6	6.4	15.0	0.8	W252K602-6S****++
0.0062	18.0	11.7	6.5	15.0	0.8	W252K622-6S****++
0.0065	18.0	11.8	6.6	15.0	0.8	W252K652-6S****++
0.0068	18.0	12.0	6.8	15.0	0.8	W252K682-6S****++
0.0072	18.0	12.1	6.9	15.0	0.8	W252K722-6S****++
0.0075	18.0	12.2	7.0	15.0	0.8	W252K752-6S****++
0.0078	18.0	12.4	7.1	15.0	0.8	W252K782-6S****++
0.0082	18.0	12.5	7.3	15.0	0.8	W252K822-6S****++
0.0084	18.0	12.6	7.4	15.0	0.8	W252K842-6S****++
0.0091	18.0	12.8	7.6	15.0	0.8	W252K912-6S****++
0.010	18.0	13.2	8.0	15.0	0.8	W252K103-6S****++
0.012	18.0	11.4	6.2	15.0	0.8	W252K123-6S****++
0.015	18.0	12.0	6.8	15.0	0.8	W252K153-6S****++
0.018	18.0	12.6	7.4	15.0	0.8	W252K183-6S****++
0.022	18.0	13.8	8.1	15.0	0.8	W252K223-6S****++
0.024	18.0	14.1	8.4	15.0	0.8	W252K243-6S****++
0.027	18.0	14.6	8.9	15.0	0.8	W252K273-6S****++
0.033	18.0	16.4	9.1	15.0	0.8	W252K333-6S****++
0.036	18.0	16.8	9.5	15.0	0.8	W252K363-8S****++

1 000 / 1 250Vdc (450Vac) [#]						
容量 C (μ F)	W max	H max	T max	P	d	产品代码 Part Number
0.0010	18.0	10.1	5.7	15.0	0.8	W253A102-6S****++
0.0012	18.0	10.5	6.0	15.0	0.8	W253A122-6S****++
0.0015	18.0	11.0	6.5	15.0	0.8	W253A152-6S****++
0.0016	18.0	11.6	6.4	15.0	0.8	W253A162-6S****++
0.0018	18.0	11.9	6.7	15.0	0.8	W253A182-6S****++
0.0020	18.0	12.2	7.0	15.0	0.8	W253A202-6S****++
0.0022	18.0	12.5	7.3	15.0	0.8	W253A222-6S****++
0.0024	18.0	12.7	7.5	15.0	0.8	W253A242-6S****++
0.0027	18.0	13.6	7.9	15.0	0.8	W253A272-6S****++
0.0030	18.0	14.0	8.3	15.0	0.8	W253A302-6S****++
0.0033	18.0	14.3	8.6	15.0	0.8	W253A332-6S****++
0.0036	18.0	11.7	6.5	15.0	0.8	W253A362-6S****++
0.0039	18.0	12.0	6.7	15.0	0.8	W253A392-6S****++
0.0043	18.0	12.2	7.0	15.0	0.8	W253A432-6S****++
0.0047	18.0	12.5	7.3	15.0	0.8	W253A472-6S****++
0.0049	18.0	12.6	7.4	15.0	0.8	W253A492-6S****++
0.0051	18.0	12.8	7.5	15.0	0.8	W253A512-6S****++
0.0053	18.0	12.9	7.7	15.0	0.8	W253A532-6S****++
0.0056	18.0	12.1	6.9	15.0	0.8	W253A562-6S****++
0.0060	18.0	12.3	7.1	15.0	0.8	W253A602-6S****++
0.0062	18.0	12.4	7.2	15.0	0.8	W253A622-6S****++
0.0065	18.0	12.6	7.4	15.0	0.8	W253A652-6S****++
0.0068	18.0	12.7	7.5	15.0	0.8	W253A682-6S****++
0.0072	18.0	12.9	7.7	15.0	0.8	W253A722-6S****++
0.0075	18.0	13.5	7.8	15.0	0.8	W253A752-6S****++
0.0078	18.0	13.7	8.0	15.0	0.8	W253A782-6S****++
0.0082	18.0	13.9	8.1	15.0	0.8	W253A822-6S****++
0.0084	18.0	13.9	8.2	15.0	0.8	W253A842-6S****++
0.0091	18.0	14.2	9.0	15.0	0.8	W253A912-6S****++
0.010	18.0	14.6	9.4	15.0	0.8	W253A103-6S****++
0.012	18.0	15.4	10.2	15.0	0.8	W253A123-6S****++
0.015	18.0	14.9	9.7	15.0	0.8	W253A153-6S****++
0.018	18.0	15.7	10.5	15.0	0.8	W253A183-6S****++
0.022	18.0	16.7	11.5	15.0	0.8	W253A223-6S****++

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 table 1)。“****”=lead form and packaging code (refer to table 1).

3. “#”当额定电压时 630VDC 时,第 4~5 位代码是 2J。当额定电压时 1250VDC 时,第 4~5 位代码是 3B。

“#” when the rated voltage is 630VDC,the digit 4~5 is 2J; when the rated voltage is 1250VDC,the digit 4~5 is 3B;

■ 外形尺寸 Dimensions (mm)

Pattern II (Reduced sizes)

1 600Vdc (450Vac)						
容量 C (μF)	W max	H max	T max	P	d	产品代码 Part Number
0.0010	18.0	10.4	6.0	15.0	0.8	W253C102-6S****++
0.0012	18.0	10.8	6.4	15.0	0.8	W253C122-6S****++
0.0015	18.0	11.3	6.9	15.0	0.8	W253C152-6S****++
0.0016	18.0	12.0	6.8	15.0	0.8	W253C162-6S****++
0.0018	18.0	12.3	7.1	15.0	0.8	W253C182-6S****++
0.0020	18.0	12.7	7.4	15.0	0.8	W253C202-6S****++
0.0022	18.0	12.9	7.7	15.0	0.8	W253C222-6S****++
0.0024	18.0	13.7	8.0	15.0	0.8	W253C242-6S****++
0.0027	18.0	11.4	6.2	15.0	0.8	W253C272-6S****++
0.0030	18.0	11.7	6.5	15.0	0.8	W253C302-6S****++
0.0033	18.0	11.9	6.7	15.0	0.8	W253C332-6S****++
0.0036	18.0	11.4	6.2	15.0	0.8	W253C362-6S****++
0.0039	18.0	11.6	6.4	15.0	0.8	W253C392-6S****++
0.0043	18.0	11.8	6.6	15.0	0.8	W253C432-6S****++
0.0047	18.0	12.1	6.9	15.0	0.8	W253C472-6S****++
0.0049	18.0	12.2	7.0	15.0	0.8	W253C492-6S****++
0.0051	18.0	12.3	7.1	15.0	0.8	W253C512-6S****++
0.0053	18.0	12.4	7.2	15.0	0.8	W253C532-6S****++
0.0056	18.0	12.6	7.4	15.0	0.8	W253C562-6S****++
0.0060	18.0	12.8	7.6	15.0	0.8	W253C602-6S****++
0.0062	18.0	12.9	7.7	15.0	0.8	W253C622-6S****++
0.0065	18.0	13.6	7.9	15.0	0.8	W253C652-6S****++
0.0068	18.0	13.7	8.0	15.0	0.8	W253C682-6S****++
0.0072	18.0	13.9	8.2	15.0	0.8	W253C722-6S****++
0.0075	18.0	14.1	8.4	15.0	0.8	W253C752-6S****++
0.0078	18.0	14.2	9.0	15.0	0.8	W253C782-6S****++
0.0082	18.0	14.4	9.2	15.0	0.8	W253C822-6S****++
0.0084	18.0	14.5	9.3	15.0	0.8	W253C842-6S****++
0.0091	18.0	14.9	9.6	15.0	0.8	W253C912-6S****++
0.010	18.0	15.3	10.0	15.0	0.8	W253C103-6S****++
0.012	18.0	16.1	10.9	15.0	0.8	W253C123-6S****++

2 000Vdc (500Vac)						
容量 C (μF)	W max	H max	T max	P	d	产品代码 Part Number
0.0010	18.0	10.4	6.0	15.0	0.8	W253D102-6S****++
0.0012	18.0	10.8	6.4	15.0	0.8	W253D122-6S****++
0.0015	18.0	11.3	6.9	15.0	0.8	W253D152-6S****++
0.0016	18.0	12.0	6.8	15.0	0.8	W253D162-6S****++
0.0018	18.0	12.3	7.1	15.0	0.8	W253D182-6S****++
0.0020	18.0	12.7	7.4	15.0	0.8	W253D202-6S****++
0.0022	18.0	12.9	7.7	15.0	0.8	W253D222-6S****++
0.0024	18.0	11.8	6.6	15.0	0.8	W253D242-6S****++
0.0027	18.0	12.1	6.9	15.0	0.8	W253D272-6S****++
0.0030	18.0	12.4	7.2	15.0	0.8	W253D302-6S****++
0.0033	18.0	12.7	7.5	15.0	0.8	W253D332-6S****++
0.0036	18.0	12.2	7.0	15.0	0.8	W253D362-6S****++
0.0039	18.0	12.4	7.2	15.0	0.8	W253D392-6S****++
0.0043	18.0	12.7	7.5	15.0	0.8	W253D432-6S****++
0.0047	18.0	13.5	7.8	15.0	0.8	W253D472-6S****++
0.0049	18.0	13.7	8.0	15.0	0.8	W253D492-6S****++
0.0051	18.0	13.8	8.1	15.0	0.8	W253D512-6S****++
0.0053	18.0	13.9	8.2	15.0	0.8	W253D532-6S****++
0.0056	18.0	14.2	8.4	15.0	0.8	W253D562-6S****++
0.0060	18.0	14.4	9.2	15.0	0.8	W253D602-6S****++
0.0062	18.0	14.5	9.3	15.0	0.8	W253D622-6S****++
0.0065	18.0	14.7	9.5	15.0	0.8	W253D652-6S****++
0.0068	18.0	14.9	9.7	15.0	0.8	W253D682-6S****++
0.0072	18.0	15.2	9.9	15.0	0.8	W253D722-6S****++
0.0075	18.0	15.3	10.1	15.0	0.8	W253D752-6S****++
0.0078	18.0	15.5	10.3	15.0	0.8	W253D782-6S****++
0.0082	18.0	15.7	10.5	15.0	0.8	W253D822-6S****++
0.0084	18.0	15.8	10.6	15.0	0.8	W253D842-6S****++
0.0091	18.0	16.2	11.0	15.0	0.8	W253D912-6S****++
0.010	18.0	16.7	11.5	15.0	0.8	W253D103-6S****++

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 packaging code (refer to table 1).

■ 外形尺寸 Dimensions (mm)

Pattern II (Reduced sizes)

2 500Vdc (500Vac)						
容量 C (μF)	W max	H max	T max	P	d	产品代码 Part Number
0.0010	18.0	10.4	6.0	15.0	0.8	W253E102-6S****+++
0.0012	18.0	10.8	6.4	15.0	0.8	W253E122-6S****+++
0.0015	18.0	11.3	6.9	15.0	0.8	W253E152-6S****+++
0.0016	18.0	12.0	6.8	15.0	0.8	W253E162-6S****+++
0.0018	18.0	12.3	7.1	15.0	0.8	W253E182-6S****+++
0.0020	18.0	12.7	7.4	15.0	0.8	W253E202-6S****+++
0.0022	18.0	12.9	7.7	15.0	0.8	W253E222-6S****+++
0.0024	18.0	11.8	6.6	15.0	0.8	W253E242-6S****+++
0.0027	18.0	12.1	6.9	15.0	0.8	W253E272-6S****+++
0.0030	18.0	12.4	7.2	15.0	0.8	W253E302-6S****+++
0.0033	18.0	12.7	7.5	15.0	0.8	W253E332-6S****+++
0.0036	18.0	13.5	7.8	15.0	0.8	W253E362-6S****+++
0.0039	18.0	13.8	8.1	15.0	0.8	W253E392-6S****+++
0.0043	18.0	14.1	8.4	15.0	0.8	W253E432-6S****+++
0.0047	18.0	14.5	9.3	15.0	0.8	W253E472-6S****+++
0.0049	18.0	14.6	9.4	15.0	0.8	W253E492-6S****+++
0.0051	18.0	14.8	9.6	15.0	0.8	W253E512-6S****+++
0.0053	18.0	15.0	9.7	15.0	0.8	W253E532-6S****+++
0.0056	18.0	15.2	10.0	15.0	0.8	W253E562-6S****+++
0.0060	18.0	15.5	10.3	15.0	0.8	W253E602-6S****+++
0.0062	18.0	15.6	10.4	15.0	0.8	W253E622-6S****+++
0.0065	18.0	15.9	10.6	15.0	0.8	W253E652-6S****+++
0.0068	18.0	16.1	10.9	15.0	0.8	W253E682-6S****+++
0.0072	18.0	16.3	11.1	15.0	0.8	W253E722-6S****+++
0.0075	18.0	16.5	11.3	15.0	0.8	W253E752-6S****+++
0.0078	18.0	16.7	11.5	15.0	0.8	W253E782-6S****+++

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 packaging code (refer to table 1).

■ 外形尺寸 Dimensions (mm) Pattern I (High performance)

800Vdc						
容量 C (μF)	W max	H max	T max	P	d	产品代码 Part Number
0.0010	18.5	12.0	7.0	15.0	0.8	W252K102-60****+++
0.0012	18.5	12.5	7.0	15.0	0.8	W252K122-60****+++
0.0015	18.5	13.0	7.5	15.0	0.8	W252K152-60****+++
0.0016	18.5	13.0	8.0	15.0	0.8	W252K162-60****+++
0.0018	18.5	13.5	8.0	15.0	0.8	W252K182-60****+++
0.0020	18.5	13.5	8.5	15.0	0.8	W252K202-60****+++
0.0022	18.5	14.0	9.0	15.0	0.8	W252K222-60****+++
0.0024	18.5	14.5	9.0	15.0	0.8	W252K242-60****+++
0.0027	18.5	14.5	9.5	15.0	0.8	W252K272-60****+++
0.0030	18.5	15.0	10.0	15.0	0.8	W252K302-60****+++
0.0033	18.5	15.5	10.0	15.0	0.8	W252K332-60****+++
0.0036	18.5	13.0	8.0	15.0	0.8	W252K362-60****+++
0.0039	18.5	13.5	8.5	15.0	0.8	W252K392-60****+++
0.0043	18.5	14.0	8.5	15.0	0.8	W252K432-60****+++
0.0047	18.5	14.0	9.0	15.0	0.8	W252K472-60****+++
0.0049	18.5	14.0	9.0	15.0	0.8	W252K492-60****+++
0.0051	18.5	14.5	9.0	15.0	0.8	W252K512-60****+++
0.0053	18.5	14.5	9.5	15.0	0.8	W252K532-60****+++
0.0056	18.5	14.5	9.5	15.0	0.8	W252K562-60****+++
0.0060	18.5	15.0	10.0	15.0	0.8	W252K602-60****+++
0.0062	18.5	15.0	10.0	15.0	0.8	W252K622-60****+++
0.0065	18.5	15.5	10.0	15.0	0.8	W252K652-60****+++
0.0068	18.5	15.5	10.5	15.0	0.8	W252K682-60****+++
0.0072	18.5	15.5	10.5	15.0	0.8	W252K722-60****+++
0.0075	18.5	16.0	10.5	15.0	0.8	W252K752-60****+++
0.0078	18.5	16.0	11.0	15.0	0.8	W252K782-60****+++
0.0082	18.5	16.5	11.0	15.0	0.8	W252K822-60****+++
0.0084	18.5	16.5	11.0	15.0	0.8	W252K842-60****+++
0.0091	18.5	17.0	11.5	15.0	0.8	W252K912-60****+++
0.010	18.5	17.5	12.0	15.0	0.8	W252K103-60****+++
0.012	18.5	13.0	8.0	15.0	0.8	W252K123-60****+++
0.015	18.5	14.0	8.5	15.0	0.8	W252K153-60****+++
0.018	18.5	14.5	9.5	15.0	0.8	W252K183-60****+++
0.022	18.5	15.5	10.0	15.0	0.8	W252K223-60****+++
0.024	18.5	15.5	10.5	15.0	0.8	W252K243-60****+++
0.027	18.5	16.0	11.0	15.0	0.8	W252K273-60****+++
0.033	23.0	16.0	9.5	19.0	0.8	W252K333-80****+++
0.036	23.0	16.5	9.5	19.0	0.8	W252K363-80****+++
0.039	23.0	16.5	10.0	19.0	0.8	W252K393-80****+++
0.047	23.0	17.5	11.0	19.0	0.8	W252K473-80****+++
0.056	23.0	18.5	11.5	19.0	0.8	W252K563-80****+++
0.068	26.0	19.0	11.0	22.0	0.8	W252K683-90****+++
0.082	26.0	20.0	12.0	22.0	0.8	W252K823-90****+++
0.10	26.0	21.5	13.0	22.0	0.8	W252K104-90****+++

1 000 / 1 200Vdc #						
容量 C (μF)	W max	H max	T max	P	d	产品代码 Part Number
0.0010	18.5	12.0	7.0	15.0	0.8	W253A102-60****+++
0.0012	18.5	12.5	7.0	15.0	0.8	W253A122-60****+++
0.0015	18.5	13.0	7.5	15.0	0.8	W253A152-60****+++
0.0016	18.5	13.0	8.0	15.0	0.8	W253A162-60****+++
0.0018	18.5	13.5	8.0	15.0	0.8	W253A182-60****+++
0.0020	18.5	13.5	8.5	15.0	0.8	W253A202-60****+++
0.0022	18.5	14.0	9.0	15.0	0.8	W253A222-60****+++
0.0024	18.5	14.5	9.0	15.0	0.8	W253A242-60****+++
0.0027	18.5	14.5	9.5	15.0	0.8	W253A272-60****+++
0.0030	18.5	15.0	10.0	15.0	0.8	W253A302-60****+++
0.0033	18.5	15.5	10.0	15.0	0.8	W253A332-60****+++
0.0036	18.5	13.0	8.0	15.0	0.8	W253A362-60****+++
0.0039	18.5	13.5	8.5	15.0	0.8	W253A392-60****+++
0.0043	18.5	14.0	8.5	15.0	0.8	W253A432-60****+++
0.0047	18.5	14.0	9.0	15.0	0.8	W253A472-60****+++
0.0049	18.5	14.0	9.0	15.0	0.8	W253A492-60****+++
0.0051	18.5	14.5	9.0	15.0	0.8	W253A512-60****+++
0.0053	18.5	14.5	9.5	15.0	0.8	W253A532-60****+++
0.0056	18.5	14.5	9.5	15.0	0.8	W253A562-60****+++
0.0060	23.0	14.5	7.5	19.0	0.8	W253A602-80****+++
0.0062	23.0	14.5	7.5	19.0	0.8	W253A622-80****+++
0.0065	23.0	14.5	8.0	19.0	0.8	W253A652-80****+++
0.0068	23.0	14.5	8.0	19.0	0.8	W253A682-80****+++
0.0072	23.0	15.0	8.0	19.0	0.8	W253A722-80****+++
0.0075	23.0	15.0	8.0	19.0	0.8	W253A752-80****+++
0.0078	23.0	15.0	8.5	19.0	0.8	W253A782-80****+++
0.0082	23.0	15.5	8.5	19.0	0.8	W253A822-80****+++
0.0084	23.0	15.5	8.5	19.0	0.8	W253A842-80****+++
0.0091	23.0	15.5	9.0	19.0	0.8	W253A912-80****+++
0.010	23.0	16.0	9.0	19.0	0.8	W253A103-80****+++
0.012	23.0	16.5	10.0	19.0	0.8	W253A123-80****+++
0.015	29.0	15.5	9.0	25.0	0.8	W253A153-A0****+++
0.018	29.0	16.5	9.5	25.0	0.8	W253A183-A0****+++
0.022	29.0	18.5	10.0	25.0	0.8	W253A223-A0****+++
0.024	29.0	18.5	10.5	25.0	0.8	W253A243-A0****+++
0.027	29.0	19.0	11.0	25.0	0.8	W253A273-A0****+++
0.033	29.0	20.5	12.0	25.0	0.8	W253A333-A0****+++
0.036	29.0	20.5	12.5	25.0	0.8	W253A363-A0****+++

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 packaging code (refer to table 1).

3. “#”当额定电压是 1200VDC 时，第 4~5 位代码是 3L。“#”when the rated voltage is 1200VDC, the digit 4~5 is 3L.

■ 外形尺寸 Dimensions (mm)

Pattern I (High performance)

1 600 /2 000Vdc #						
容量 C (μF)	W max	H max	T max	P	d	产品代码 Part Number
0.0010	18.5	12.0	7.0	15.0	0.8	W253C102-60*****
0.0012	18.5	12.5	7.0	15.0	0.8	W253C122-60*****
0.0015	18.5	13.0	7.5	15.0	0.8	W253C152-60*****
0.0016	18.5	13.0	8.0	15.0	0.8	W253C162-60*****
0.0018	18.5	13.5	8.0	15.0	0.8	W253C182-60*****
0.0020	18.5	13.5	8.5	15.0	0.8	W253C202-60*****
0.0022	18.5	14.0	9.0	15.0	0.8	W253C222-60*****
0.0024	18.5	14.5	9.0	15.0	0.8	W253C242-60*****
0.0027	18.5	14.5	9.5	15.0	0.8	W253C272-60*****
0.0030	18.5	15.0	10.0	15.0	0.8	W253C302-60*****
0.0033	18.5	15.5	10.0	15.0	0.8	W253C332-60*****
0.0036	23.0	14.5	9.0	19.0	0.8	W253C362-80*****
0.0039	23.0	15.5	9.0	19.0	0.8	W253C392-80*****
0.0043	23.0	16.0	9.0	19.0	0.8	W253C432-80*****
0.0047	23.0	16.0	9.5	19.0	0.8	W253C472-80*****
0.0049	23.0	16.5	9.5	19.0	0.8	W253C492-80*****
0.0051	23.0	16.5	10.0	19.0	0.8	W253C512-80*****
0.0053	23.0	16.5	10.0	19.0	0.8	W253C532-80*****
0.0056	23.0	17.0	10.0	19.0	0.8	W253C562-80*****
0.0060	23.0	15.5	8.5	19.0	0.8	W253C602-80*****
0.0062	23.0	15.5	9.0	19.0	0.8	W253C622-80*****
0.0065	23.0	15.5	9.0	19.0	0.8	W253C652-80*****
0.0068	23.0	16.0	9.0	19.0	0.8	W253C682-80*****
0.0072	23.0	16.0	9.5	19.0	0.8	W253C722-80*****
0.0075	23.0	16.5	9.5	19.0	0.8	W253C752-80*****
0.0078	23.0	16.5	9.5	19.0	0.8	W253C782-80*****
0.0082	23.0	16.5	10.0	19.0	0.8	W253C822-80*****
0.0084	23.0	16.5	10.0	19.0	0.8	W253C842-80*****
0.0091	23.0	17.0	10.5	19.0	0.8	W253C912-80*****
0.010	29.0	15.5	8.5	25.0	0.8	W253C103-A0*****
0.012	29.0	16.0	9.5	25.0	0.8	W253C123-A0*****
0.015	29.0	18.0	9.5	25.0	0.8	W253C153-A0*****
0.018	29.0	19.0	10.5	25.0	0.8	W253C183-A0*****
0.022	29.0	20.0	11.5	25.0	0.8	W253C223-A0*****
0.024	29.0	20.5	12.0	25.0	0.8	W253C243-A0*****
0.027	31.0	20.5	12.0	27.0	0.8	W253C273-B0*****
0.033	31.0	21.5	13.0	27.0	0.8	W253C333-B0*****
0.036	31.0	22.0	13.5	27.0	0.8	W253C363-B0*****

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 packaging code (refer to table 1).

3. “#”当额定电压时 2000VDC 是，第 4~5 位代码是 3D。

when the rated voltage is 2 000VDC, the digit 4~5 is 3D

Maximum permissible voltage change per unit of time

Pattern I

Rated Voltage(V)	Max dV/dt(V/us)				
	P=15mm	P=19mm	P=22mm	P=25mm	P=27mm
800	15000	14000	12000	/	/
1000/1200	30000	20000	/	15000	/
1600/2000	36000	22000	/	16000	12000

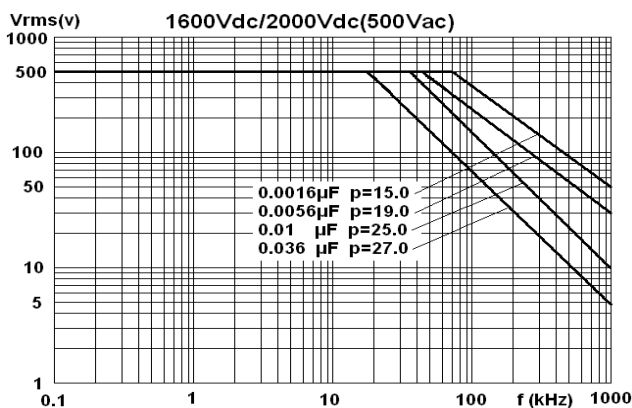
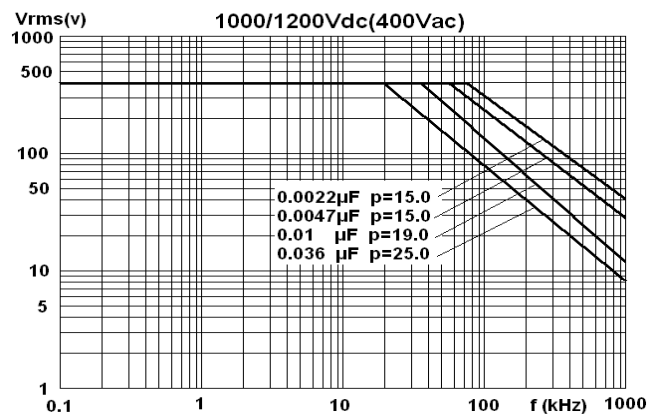
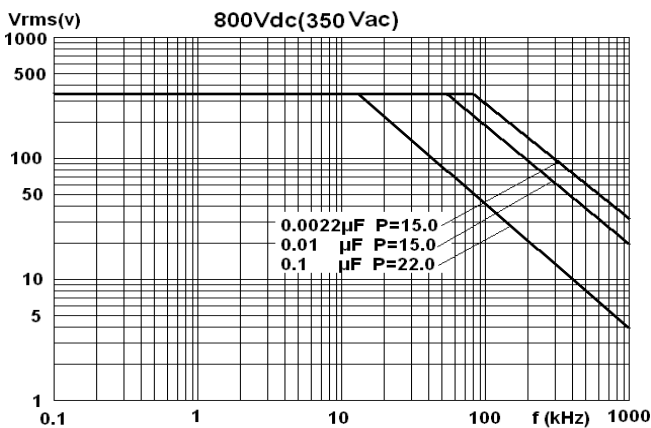
Pattern II

Rated Voltage (V)	Max dV/dt(V/us)	
	P=15mm	
630/800(700V _{op} max)	11000	
1000/1250(1000V _{op} max)	28000	
1600(1400V _{op} max)	32000	
2000(1600V _{op} max)	35000	
2500(1800V _{op} max)	40000	

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(Vr.m.s) VERSUS FREQUENCY



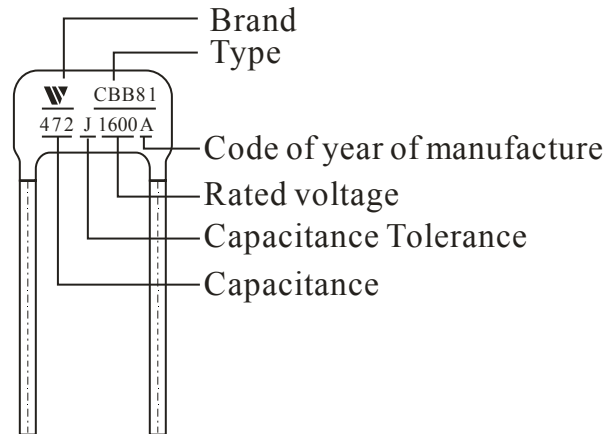
Note: sinusoidal wave-form, environment temperature $\leq 85^{\circ}\text{C}$, internal temperature rise $\Delta T=10^{\circ}\text{C}$, p (pitch) in mm.

Test Method And Performance

No.	Item	Performance	Test method(IEC 60384-17)
1	Solderability	Good quality of tinning	Solder temperature:245°C±5°C Immersion time: 2.0s±0.5s
2	Initial measurement	Capacitance Tgδ: 10kHz	
	Terminal strength	There shall be no visible damage	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: ≤0.002 (10kHz)	
3	Initial measurement	Capacitance Tgδ: 10kHz	
	Rapid change of temperature	There shall be no evidence of deterioration.	θ _A =-40°C, θ _B =+105°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 for each 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 ≤±2%(relative to the initial value) Increase of tgδ: ≤0.002 (10kHz) IR: ≥ 50% of the rated value	
4	Climate sequence	Initial measurement	Capacitance Tgδ: 10kHz
		Dry heat	+105°C,16h
		Damp heat Cyclic	Test Db, Severity: b, the first cycle
		Cold	-40°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,

No.	Item		Performance	Test method(IEC 60384-17)
4	climate sequence (continue)	Damp heat cyclic other		Test Db, Severity b, the other cycles, Applying U_R for 1 minute after the test finished.
		Final measurement	There shall be no evidence of deterioration and the marking shall be legible. $\Delta C/C \leq \pm 3\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.002 (10kHz) 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. $\Delta C/C \leq \pm 3\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.001 (10kHz) IR: $\geq 50\%$ of the rated value	Temperature: $40^\circ\text{C} \pm 2^\circ\text{C}$ Humidity: $93 \pm 2\%$ RH Duration: 21 days
6	Endurance		$\Delta C/C \leq \pm 5\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.0015 (10kHz) IR: $\geq 50\%$ of the rated value	Temperature: $+85^\circ\text{C}$ Voltage: $1.25 \times U_R$ (50Hz) Duration: 1 000h
7	Temperature characteristic		Measuring capacitance at test point b, d, f: Characteristic at lower category temperature -40°C : $0 \leq (C_b - C_d)/C_d \leq +3\%$ Characteristic at upper category temperature $+105^\circ\text{C}$: $-3.25\% \leq (C_f - C_d)/C_d \leq 0$	Static method: The capacitors should be kept at the following temperature in turn: a. $(+20 \pm 2)^\circ\text{C}$ b. $(-40 \pm 2)^\circ\text{C}$ d. $(20 \pm 2)^\circ\text{C}$ f. $(+105 \pm 2)^\circ\text{C}$ g. $(+20 \pm 2)^\circ\text{C}$
8	Charging and discharging		$\Delta C/C \leq \pm 3\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.003 (10kHz) 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: $220/C_R$ (Ω) Discharging resistance: $R = 10/C_R$ (Ω) or 20Ω (whichever is the greater) C_R : rated capacitance (μF)
9	Passive flammability		The flaming time of each capacitor shall not go beyond 30s after it is taken apart from the flame Drop of each capacitor caused by flame shall not fire the tissue below	IEC 695-2-2 Needle flame test The category of passive flammability: C Expose time in flame : 1 time Capacitor volume Exposing time $V \leq 250\text{mm}^3$ 5s $250\text{mm}^3 < V \leq 500\text{mm}^3$ 10s $500\text{mm}^3 < V \leq 1750\text{mm}^3$ 20s $V > 1750\text{mm}^3$ 30s

■ Marking



■ Taping for dipped-type capacitor

▲ Outline Drawing

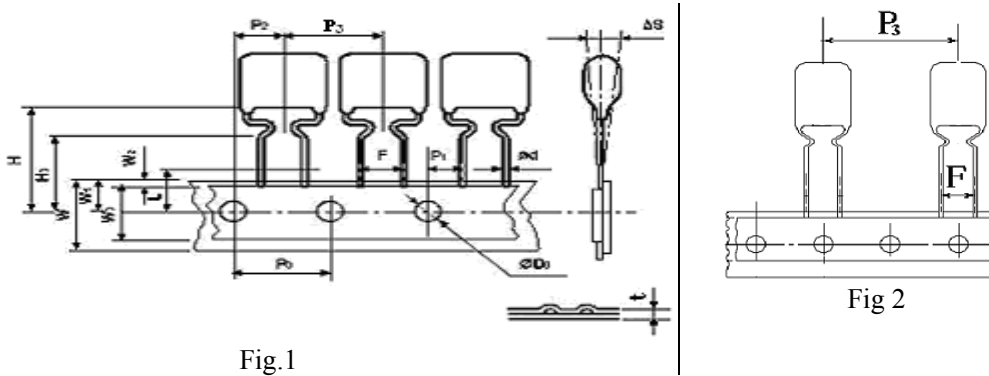


Fig.1

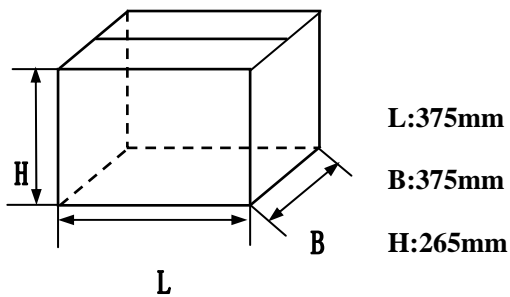
▲ Taping Dimensions(mm)

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	$\triangle S$	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

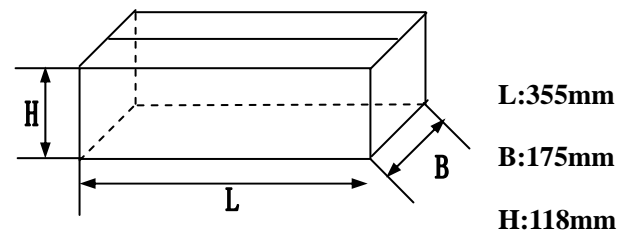
Note: * $P_0=15\text{mm}$ is also available;
** F can be other lead spacing;

■ Packing box sizes

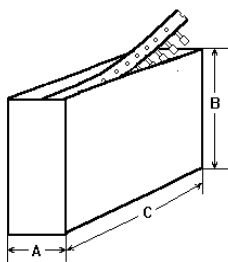
1. Out packing box for bulk



2. Inner packing box for bulk



3. Box sizes for Ammo-pack



A=48 ± 3; B=260 ± 3; C=330 ± 3