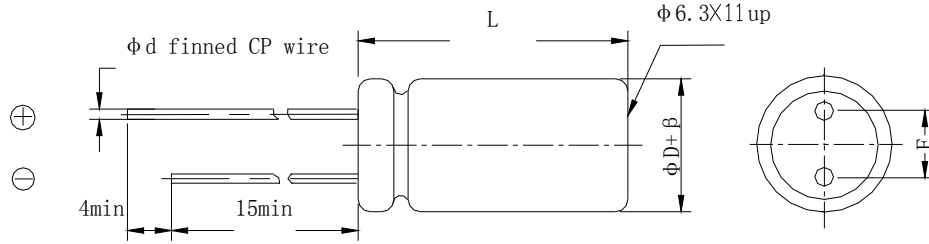




**◆产品结构**
**Product Structure**


$\beta$ (mm)	$\pm 0.5$			$\pm 1.0$				
$\Phi D$ (mm)	5	6.3	8	10	12.5	16	18	22
$F \pm 0.5$ (mm)	2.	2.5	3.5	5.0		7.5		10.0
$\Phi d \pm 0.1$ (mm)	0.5		0.6			0.8		
L(mm)	11,12	12,16	12,16,	16,20,25	16,20,25,30,35	20,25,30,35,40	25,30,35,40	
	$L \pm 2.0$							

**◆主要特性表**
**Main specifications**

主要特性 Performance Characteristics																					
额定工作电压范围 Rated Voltage Range	10~400V.DC																				
使用温度范围 Operating Temperature Range	-40°C~+150°C																				
标称静电容量范围 Nominal Capacitance Range	2.2~4700 $\mu$ F																				
静电容量允许偏差 Capacitance Tolerance	$\pm 20\%$ (M, +25°C, 120Hz)																				
漏电流 Leakage Current (25°C)	<table border="1" style="width: 100%;"> <tr> <td>额定工作电压(V) Rated working voltage</td> <td style="text-align: center;">10~100</td> <td style="text-align: center;">160~400</td> </tr> <tr> <td>漏电流 Leakage current</td> <td>2 分钟后 <math>I \leq 0.01CV</math> 或 <math>3(\mu A)</math>, 取最大值 After 2 min. <math>I \leq 0.01CV</math> or <math>3(\mu A)</math>, Whichever is greater.</td> <td>2 分钟后 <math>I \leq 0.03CV + 25(\mu A)</math> After 2 min. <math>I \leq 0.03CV + 25(\mu A)</math></td> </tr> </table>	额定工作电压(V) Rated working voltage	10~100	160~400	漏电流 Leakage current	2 分钟后 $I \leq 0.01CV$ 或 $3(\mu A)$ , 取最大值 After 2 min. $I \leq 0.01CV$ or $3(\mu A)$ , Whichever is greater.	2 分钟后 $I \leq 0.03CV + 25(\mu A)$ After 2 min. $I \leq 0.03CV + 25(\mu A)$														
	额定工作电压(V) Rated working voltage	10~100	160~400																		
漏电流 Leakage current	2 分钟后 $I \leq 0.01CV$ 或 $3(\mu A)$ , 取最大值 After 2 min. $I \leq 0.01CV$ or $3(\mu A)$ , Whichever is greater.	2 分钟后 $I \leq 0.03CV + 25(\mu A)$ After 2 min. $I \leq 0.03CV + 25(\mu A)$																			
C: 标称静电容量 ( $\mu F$ ) Nominal Capacitance in $\mu F$ V: 额定工作电压 (V) Rated working voltage in V																					
损耗角正切 DF Dissipation Factor	<table border="1" style="width: 100%;"> <tr> <td>额定工作电压(V) Rated working voltage</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>160</td> <td>200</td> <td>200~400</td> </tr> <tr> <td>DF(MAX) (25°C, 120Hz)</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.12</td> <td>0.11</td> <td>0.20</td> <td>0.25</td> </tr> </table>	额定工作电压(V) Rated working voltage	10	16	25	35	50	63	160	200	200~400	DF(MAX) (25°C, 120Hz)	0.20	0.16	0.14	0.12	0.12	0.12	0.11	0.20	0.25
	额定工作电压(V) Rated working voltage	10	16	25	35	50	63	160	200	200~400											
DF(MAX) (25°C, 120Hz)	0.20	0.16	0.14	0.12	0.12	0.12	0.11	0.20	0.25												
当容量值大于 1000 $\mu F$ 时, 每增加 1000 $\mu F$ , DF 值加 0.02 For capacitance of more than 1000 $\mu F$ , add 0.02 for every increase of 1000 $\mu F$ .																					

浪涌电压 Surge Voltage	额定工作电压(V) Rated working voltage	10	16	25	35	50	63	100	160	200	250	350	400
	浪涌电压(V) Surge voltage	13	20	32	44	63	79	125	200	250	300	400	450
温度特性 Temperature Stability	额定工作电压(V) Rated working voltage			10	16	25	35	50	63	100	160~250	350~400	
	阻抗比(120Hz) Impedance Ratio	z-25°C/z+25°C			2	2	2	2	2	3	3	3	6
		z-40°C/z+25°C			4	4	4	4	4	4	3	6	12
高温负荷特性 Load life	<p>在+150℃环境中施加额定工作电压和最大允许纹波电流 2000 小时后,电容器的性能符合下面要求:</p> <p>After application of rated working voltage with max permissible ripple current specified at +150℃ for 2000hours, capacitors meet the characteristics requirements measured at +20℃ listed at below:</p> <p>1、电容量变化率:±30%初始测量值以内 Capacitance change : ±30% initial measured value</p> <p>2、漏电流: ≤初始规定值 Leakage current: ≤initial specified value</p> <p>3、损耗角正切值≤200%倍初始规定值 Dissipation factor: ≤200% initial specified value</p>												
高温贮存特性 Shelf life	<p>在+150℃环境无负荷放置 1000 小时后, 根据 JIS-C-5101-4, 加额定电压 30min.,常温放置 24~48 小时后测试, 电容器的性能符合下面要求:</p> <p>After leaving capacitors under no load at +150℃for 1000 hours, According to JIS-C-5101-4, apply the rated DC voltage for 30 minutes and store the capacitors under room temperature for 24-48 hours. The capacitors meet the characteristics listed as below:</p> <p>1、电容量变化率:±20%初始测量值以内 Capacitance change : ±20% initial measured value</p> <p>2、漏电流: ≤200%倍初始规定值 Leakage current: ≤200% initial specified value</p> <p>3、损耗角正切值≤200%倍初始规定值 Dissipation factor: ≤200% initial specified value</p>												

**◆尺寸表、允许纹波、电流纹波电流频率因子**

Dimensions and ripple current and frequency coefficient

纹波电流频率因子

Ripple current frequency coefficient

Freq(Hz) Cap(μF)	50(60)	100(120)	500	1K	≥10k
2.2~6.8	0.50	1.0	1.2	1.30	1.50
10~15	0.65	1.0	1.2	1.30	1.50
22~33	0.80	1.0	1.2	1.30	1.50
47~220	0.30	0.40	0.75	0.92	1.00
330~1000	0.40	0.50	0.80	0.95	1.00
2200~4700	0.55	0.65	0.85	0.98	1.00

**尺寸表与允许纹波电流**
**Dimensions and ripple current**

WV(V) Cap(uF)	10		16		25		35		50		63	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
47											10×16	220
100							10×16	370	10×20	300	12.5×20	350
220					10×16	370	10×20	460	12.5×20	400	16×30	650
330			10×16	370	10×20	460	12.5×20	600	12.5×25	500	16×35	680
470	10×16	370	10×20	460	12.5×20	600	12.5×25	750	16×31	700	18×35	750
1000	12.5×20	600	12.5×25	600	16×31	1100	16×35	1150	18×35	850		
2200	16×30	1100	16×35	1150	18×40	1370						
3300	16×35	1150	18×35	1300								
4700	18×35	1300										

(1) 外形尺寸 Case Size D×L(mm)

(2) 最大允许纹波电流 Max allowable ripple current (mA rms +150°C,100kHz)

WV(V) Cap(uF)	160		200		250		350		400	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
2.2									10×16	36
3.3							10×16	53	10×20	53
4.7							10×20	75	12.5×20	75
6.8							12.5×20	100	12.5×20	100
10			10×16	125	10×16	130	12.5×20	120	12.5×20	120
15	10×16	145	10×20	160	10×20	170	12.5×20	150	12.5×25	150
22	10×20	170	12.5×20	200	12.5×20	220	12.5×25	200	16×25	300
33	12.5×20	220	12.5×25	220	16×20	350	16×25	350	16×30	400

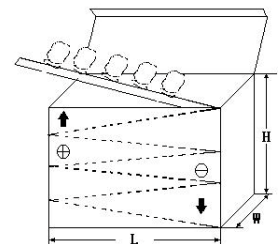
(1) 外形尺寸 Case Size D×L(mm)

(2) 最大允许纹波电流 Max allowable ripple current (mA rms +150°C,100kHz)

**◆包装**
**Packaging**

\* 编带产品包装规范与数量 Taped packaging quantity

直径 ΦD(mm)	数量(只) Qty.(Pcs)	L(电容高度)≤22mm	L(电容高度)=25±2mm
		L×W×H(mm)	L×W×H(mm)
Φ5	2000	328×235×50	328×235×57
Φ6.3	1500		
Φ8	1000		
Φ10	600		
Φ12.5	400		
Φ16	250		
Φ18	200		



\* 散装品包装数量 Bulk packaging quantity

直径 ΦD(mm) Diameter	高度 L(mm) Length	数量 (只/袋) Quantity (pcs/bag)	袋/盒 bag/box	内箱/外箱 Inner box/outer box	(只/箱) psc/box
Φ4	7-8	1000	15	4	60000
Φ5	5-7	1000	12	4	48000
Φ5	11	1000	10	4	40000
Φ6.3	5-7	1000	10	4	40000
Φ6.3	8-15	1000	8	4	32000
Φ6.3	15-20	1000	6	4	24000
Φ8	5-12	500	8	4	16000
Φ8	14-16	500	8	4	16000
Φ8	20	500	6	4	12000
Φ10	9-13	500	6	4	12000
Φ10	14-16	250	8	4	8000
Φ10	17-20	250	8	4	8000
Φ10	25-30	200	8	4	6400
Φ10	31-35	200	6	4	4800
Φ12-Φ13	16-28	200	6	4	4800
Φ12-Φ13	30-40	100	8	4	3200
Φ12-Φ13	45-55	100	6	4	2400
Φ16	15-20	100	8	4	3200
Φ16	21-30	100	6	4	2400
Φ16	31-40	50	10	4	2000
Φ18	15-20	100	6	2	1200
Φ18	25-30	50	8	2	800
Φ18	35-40	50	6	2	600
Φ18	41-50	25	10	2	500
Φ20	25-40	50	10	2	1000
Φ22	25-35	50	5	2	500
Φ22	≥40	25	10	2	500