

- 5mm 高，微型体积。Be 5mm in height and mini-size
- 适用于照相机、汽车音响、随身听、DVD、对讲机、手机、复读机等  
Suitable for camera, car audio, mini-audio sets, DVD, interphone, mobile phone, etc.
- ROHS 指令已对应完毕。Adapted to the ROHS directive.

## 主要技术性能 Specifications

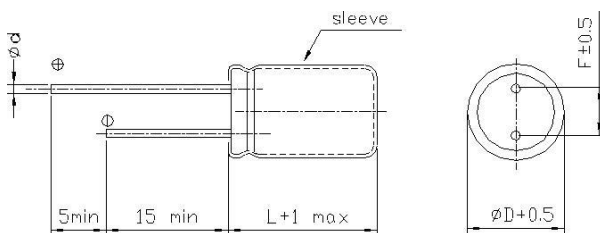
项目 Items	特性 Performance Characteristics																								
使用温度范围 Operating temperature range	-40 ~ +85℃																								
额定电压范围 Rated voltage range	4 ~ 50V																								
标称电容量范围	0.1~470μF																								
标称电容量允许偏差 Capacitance tolerance	± 20% (120Hz, +20°C)																								
漏电流 Leakage current	$I \leq 0.01CV$ (μA) 或 $3\mu A$ 2 分钟(at 20°C, after 2 minutes) 取较大者(Whichever is greater)																								
损耗角正切值 (tg δ) Dissipation factor (+20°C, 120Hz)	<table border="1"> <thead> <tr> <th><math>U_R</math> (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>tg δ</td> <td>0.35</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> </tr> </tbody> </table>	$U_R$ (V)	4	6.3	10	16	25	35	50	tg δ	0.35	0.24	0.20	0.16	0.14	0.12	0.12								
$U_R$ (V)	4	6.3	10	16	25	35	50																		
tg δ	0.35	0.24	0.20	0.16	0.14	0.12	0.12																		
温度特性 Temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th><math>U_R</math> (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z-25°C / +20°C</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C / +20°C</td> <td>15</td> <td>10</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	$U_R$ (V)	4	6.3	10	16	25	35	50	Z-25°C / +20°C	7	4	3	2	2	2	2	Z-40°C / +20°C	15	10	6	4	4	3	3
$U_R$ (V)	4	6.3	10	16	25	35	50																		
Z-25°C / +20°C	7	4	3	2	2	2	2																		
Z-40°C / +20°C	15	10	6	4	4	3	3																		
耐久性 Load life	<p>+85℃加额定电压 1000 小时，恢复 16 小时后： After applying rated voltage for 1000 hours at +85℃ and then resumed for 16 hours:</p> <p>电容量变化率 Capacitance change : ±25%初始测量值以内 ±25% of the initial measured value (4V and Ø3: ≤ ±30%)</p> <p>漏 电 流 Leakage current : ≤ 初始规定值 ≤ the initial specified value</p> <p>损耗角正切值 Dissipation factor : ≤ 2 倍初始规定值 ≤ 2 times of the initial specified value</p>																								
高温贮存 Shelf life	<p>+85℃, 1000 小时贮存后,恢复 16 小时后： After storage for 1000 hours at +85℃ and then resumed for 16 hours</p> <p>电容量变化率 Capacitance change : ±25%初始测量值以内 ±25% of the initial measured value (4V and Ø3: ≤ ±30%)</p> <p>漏 电 流 Leakage current : ≤ 2 倍初始规定值 ≤ 2 times of the initial specified value</p> <p>损耗角正切值 Dissipation factor : ≤ 2 倍初始规定值 ≤ 2 times of the initial specified value</p>																								

## 频率修正系数 Frequency coefficient

F(Hz) CAP(μF)	60	120	1K	≥10k
0.1~68	0.8	1	1.3	1.5
100~470	0.8	1	1.15	1.2

## 外形图及尺寸表 Case size table

单位 Unit: mm



D	3	4	5	6.3	8
F	1.0	1.5	2.0	2.5	3.5
d	0.4	0.45			

## 尺寸 DIMENSIONS

CAP(μF)	WW	4V(0G)		6.3V(0J)		10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1	0R1													3x5	1.0
														4x5	1.5
0.22	R22													3x5	2.0
														4x5	2.6
0.33	R33													3x5	3.0
														4x5	3.2
0.47	R47													3x5	3.5
														4x5	4.0
1	010													3x5	7
														4x5	8
2.2	2R2					4x5	6	4x5	7	3x5	8	3x5	8	3x5	10
														4x5	13
3.3	3R3					4x5	8	4x5	9	3x5	10	4x5	14	4x5	17
4.7	4R7					4x5	12	3x5	13	4x5	16	4x5	18	5x5	20
10	100			3x5	15	3x5	17	3x5	23	5x5	27	5x5	29	6.3x5	33
22	220	3x5	19	3x5	28	3x5	33	4x5	37	5x5	37	6.3x5	46	6.3x5	40
		4x5	22	4x5	32	4x5	36	5x5	40	6.3x5	42	8x5	50	8x5	52
33	330	4x5	28	4x5	37	4x5	41	5x5	49	6.3x5	52	8x5	62	8x5	71
47	470	4x5	33	4x5	45	5x5	52	6.3x5	58	8x5	70	8x5	80		
100	101	5x5	56	5x5	70	5x5	65	6.3x5	80	8x5	110				
						6.3x5	80	8x5	92						
220	221	6.3x5	96	6.3x5	110	6.3x5	105	8x5	135						
						8x5	135								
330	331	8x5	145	8x5	145	8x5	146	8x5	148						
470	471	8x5	185	8x5	210										

Size  $\phi D \times L$ (mm)

Maximum Allowable Ripple Current (mA rms) at 85°C 120Hz