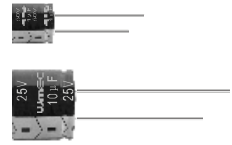


RS Wide Temperature Range, Height 5mm Series

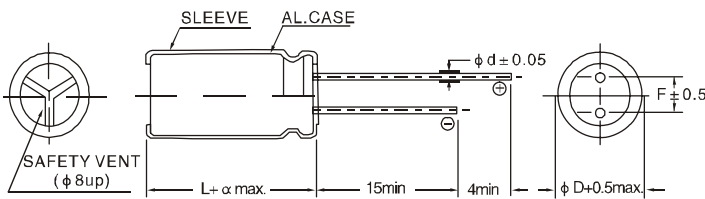
- Ultra miniature series with height 5mm
- Suitable to replace tantalum capacitors at low cost
- Wide operating temperature range of $-40^{\circ}\text{C}\sim+105^{\circ}\text{C}$



• SPECIFICATIONS

Item	Characteristics																								
Operating Temperature Range	$-40\sim+105^{\circ}\text{C}$																								
Rated Working Voltage Range	4~50V.DC																								
Capacitance Tolerance	$\pm 20\%(M)$ at 120Hz, 25 $^{\circ}\text{C}$																								
Leakage Current (max.)	$I=0.01CV$ or $3\mu\text{A}$ whichever is greater after 2 minutes																								
	I: Leakage Current (μA) C: Nominal Capacitance(μF) Rated Working Voltage (V)																								
Dissipation Factor ($\tan \delta$) (at 120Hz, 25 $^{\circ}\text{C}$) (max.)	<table border="1"> <thead> <tr> <th>WV</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>$\tan \delta$</td> <td>0.35</td> <td>0.27</td> <td>0.23</td> <td>0.19</td> <td>0.15</td> <td>0.13</td> <td>0.11</td> </tr> </tbody> </table>	WV	4	6.3	10	16	25	35	50	$\tan \delta$	0.35	0.27	0.23	0.19	0.15	0.13	0.11								
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Low Temperature Stability (Impedance ratio at 120Hz)	<table border="1"> <thead> <tr> <th>WV</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>$Z(-25^{\circ}\text{C})/Z(+25^{\circ}\text{C})$</td> <td>7</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>$Z(-40^{\circ}\text{C})/Z(+25^{\circ}\text{C})$</td> <td>12</td> <td>8</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	WV	4	6.3	10	16	25	35	50	$Z(-25^{\circ}\text{C})/Z(+25^{\circ}\text{C})$	7	3	3	2	2	2	2	$Z(-40^{\circ}\text{C})/Z(+25^{\circ}\text{C})$	12	8	5	4	3	3	3
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Load Life	After 1000 hours application of W. V. at 105 $^{\circ}\text{C}$, the capacitor shall meet the following limits.																								
	Capacitance Change	$\leq \pm 25\%$ of the initial value.																							
	Dissipation Factor	$\leq 200\%$ of the initial specified value.																							
Shelf Life(105 $^{\circ}\text{C}$)	After 500 hours of no load test, leakage current, capacitance and $\tan \delta$ are same as load life value.																								
Reference Standard	JISC - 5141																								

• DRAWING(Unit:mm)



ϕD	4	5	6	8
F	1.5	2.0	2.5	2.5 3.5
ϕd	0.45	0.45	0.45	0.45
α	1.0			1.5

• DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV Cap.(μF)	4		6.3		10		16		25		35		50	
	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.	SIZE	R.C.
0.1													4x5	1.6
0.22													4x5	2.4
0.33													4x5	3.2
0.47													4x5	4
0.68													4x5	5.6
1.0													4x5	5.6
2.2													4x5	10
3.3													4x5	12
4.7									4x5	12	4x5	13	5x5	15
6.8									4x5	15	5x5	17	5x5	20
10			4x5	12	4x5	13	4x5	16	5x5	19	5x5	22	6.3x5	26
22	4x5	16	4x5	16	5x5	22	5x5	29	6.3x5	34	6.3x5	36		
33	4x5	20	5x5	23	5x5	29	6.3x5	37	6.3x5	45				
47	4x5	24	5x5	28	6.3x5	35	6.3x5	46	6.3x5	58				
68	5x5	36	6.3x5	46	6.3x5	47	6.3x5	52	8x5	58				
100	5x5	41	6.3x5	50	6.3x5	52	6.3x5	58	8x5	65				
220	6.3x5	56	8x5	60	8x5	65								
330	8x5	150	8x5	175										

↑ Ripple current (m A rms) at 105 $^{\circ}\text{C}$, 120Hz
 ↑ Case size $\phi D \times L$ (mm)