

Standard Chip Aluminum Electrolytic Capacitor

WS series

- Reflow soldering is available
- Available for high density surface mounting
- High stability and reliability
- Lifetime:85°C,2000Hr
- For the special designing requirement,please contact us.

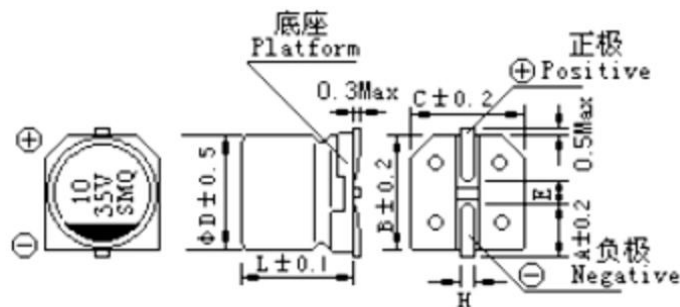


Specifications

Item	Performance Characteristics																						
Operating Temperature Range	-40 to +85°C																						
Rated Voltage Range	6.3 to 50VDC																						
Capacitance Range	0.1 to 1500uF																						
Capacitance Tolerance	±20%(120Hz,+20°C)																						
Leakage Current (+20°C,max)	$I \leq 0.02 C_R U_R (\mu A)$ or 3uA Whichever is greater(after 2 minutes)																						
Dissipation Factor(120Hz 20°C)	<table border="1"> <thead> <tr> <th>UR(V)</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 rowspan="2">tanδ</td> <td>ø4~ø6.3</td> <td>0.26</td> <td>0.22</td> <td>0.18</td> <td>0.16</td> <td>0.13</td> <td>0.12</td> </tr> <tr> <td>ø8/ø10</td> <td>0.35</td> <td>0.26</td> <td>0.2</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </tbody> </table>	UR(V)	6.3	10	16	25	35	50	tanδ	ø4~ø6.3	0.26	0.22	0.18	0.16	0.13	0.12	ø8/ø10	0.35	0.26	0.2	0.16	0.14	0.12
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Temperature Characteristics Impedance Ratio(120Hz)	<table border="1"> <thead> <tr> <th>UR(V)</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-40°C/Z+20°C</td> <td>8</td> <td>8</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	UR(V)	6.3	10	16	25	35	50	Z-40°C/Z+20°C	8	8	4	4	3	3								
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Load Life	<p>After applying rated voltage for 2000 hours at +85°C and then resumed 16 hours. The capacitor shall meet the following limits.</p> <p>Capacitance change : ≤±20% of the initial measured value</p> <p>Dissipation factor : ≤200% of the initial specified value</p> <p>Leakage current : ≤The initial specified value</p>																						
Shelf Life	<p>After storage for 1000 hours at +85°C and then resumed 16 hours. The capacitor shall meet the following limits.</p> <p>Capacitance change : ≤±20% of the initial measured value</p> <p>Dissipation factor : ≤200% of the initial specified value</p> <p>Leakage current : ≤200% of the initial specified value</p>																						
Rasistance to Soldering Heat	<p>The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds.After removing from the hot plate and restored at room temperature,then meet the following requirement.</p> <p>Capacitance change : ≤±10% of the initial measured value</p> <p>Dissipation factor : ≤The initial specified value</p> <p>Leakage current : ≤The initial specified value</p>																						

Dimensions & Marking

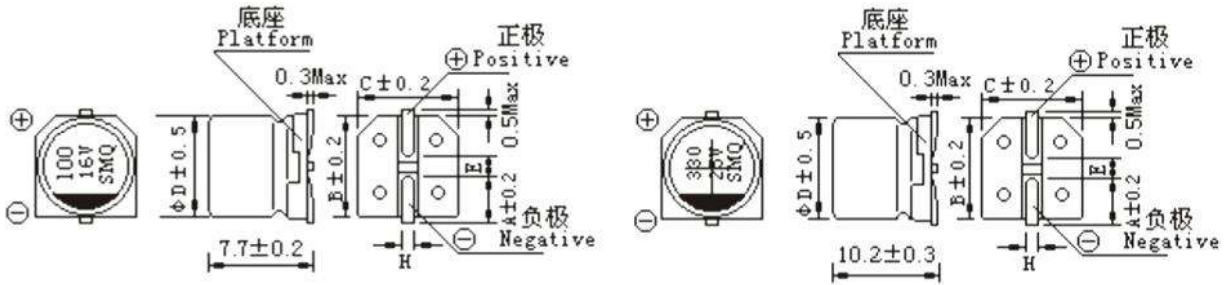
(Φ4~Φ6.3)



Standard Chip Aluminum Electrolytic Capacitor

($\Phi 6.3 \times 7.7$)

($\Phi 8 \sim \Phi 10 \times 10.2$)



Size	$\Phi 4 \times 5.4$	$\Phi 5 \times 5.4$	$\Phi 6.3 \times 5.4$	$\Phi 6.3 \times 7.7$	$\Phi 8 \times 10.2$	$\Phi 10 \times 10.2$
A	1.8	2.1	2.4	2.5	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1	1.3	2.2	2.2	3.1	4.5
L	5.4	5.4	5.4	7.7	10.2	10.2
H		0.5~0.8		0.5~0.8	0.8~1.1	0.8~1.1

■ Nominal capacitance, rated voltage, rated ripple current and case size table

DXL (mm)	6.3		10		16		25		35		50	
	DXL mm	Ripple mA	DXL mm	Ripple mA	DXL mm	Ripple mA	DXL mm	Ripple mA	DXL mm	Ripple mA	DXL mm	Ripple mA
0.1											4x5.4	1
0.22											4x5.4	2
0.33											4x5.4	2.8
0.47											4x5.4	4
1											4x5.4	8.4
2.2											4x5.4	13
3.3									4x5.4	18	4x5.4	17
4.7							4x5.4	16	4x5.4	20	5x5.4	20
10					4x5.4	23	4x5.4	24	5x5.4	29	6.3x5.4	33
22	4x5.4	28	4x5.4	30	5x5.4	37	5x5.4	38	6.3x5.4	46	6.3x5.4	43
33	5x5.4	37	5x5.4	41	5x5.4	44	6.3x5.4	52	6.3x5.4	53	6.3x7.7	85
47	5x5.4	45	6.3x5.4	52	6.3x5.4	58	6.3x5.4	60	6.3x7.7	70	8x10.2	140
100	6.3x5.4	70	6.3x5.4	76	6.3x5.4	86	6.3x7.7	130	8x10.2	175	10x10.2	195
220	6.3x5.4	95	6.3x7.7	150	6.3x7.7	150	8x10.2	232	10x10.2	265	10x10.2	415
330	6.3x7.7	150	8x10.2	240	8x10.2	270	10x10.2	305	10x10.2	324		
470	8x10.2	265	8x10.2	290	10x10.2	330	10x10.2	393				
1000	10x10.2	400	10x10.2	454								
1500	10x10.2	489										

Ripple Current (mA,rms) at 85°C 120Hz

■ Frequency coefficient of rated ripple current

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz ≤
Coefficient					
0.1~47uF	0.80	1.00	1.20	1.30	1.50
100~1500uF	0.80	1.00	1.10	1.15	1.20