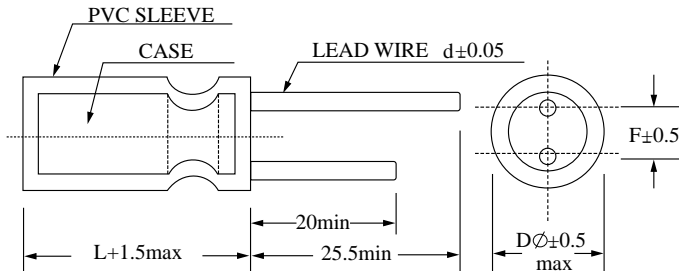


- Special designed for smaller size
- Operation for 2000 hours at 85 °C

SM Series Standard type



Unit: mm

D ∅	5	6	8	10	13	16	18	20
d	0.5	0.5	0.5	0.6	0.6	0.8	0.8	1.0
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0

ITEM	CHARACTERISTIC																													
Operation Temperature Range	-40~+80 °C	-25~+85 °C																												
Rated Working Voltage Range	10V~100V DC	160V~450V DC																												
Capacitance Tolerance (120Hz, 25 °C)	±20% (M)																													
Leakage Current (25 °C)	Less than 0.02CV or 3μA whichever is greater	Less than 0.03CV or 10μA whichever is greater																												
	I: Leakage Current (μA) C: Rated Capacitance (μF) V: Working Voltage (V) After two minutes applying the DC working voltage																													
Dissipation Factor (120Hz, 25 °C) (Tan.θ)	<table border="1"> <tr> <td>W.V.</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Tan.θ</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.02</td> <td>0.02</td> <td>0.02</td> <td>0.02</td> <td>0.02</td> <td>0.024</td> <td>0.024</td> </tr> </table> For capacitance exceeding 1000μF, add 0.02 per increment of 1000μF		W.V.	10	16	25	35	50	63	100	160	200	250	350	400	450	Tan.θ	0.20	0.16	0.14	0.12	0.10	0.10	0.02	0.02	0.02	0.02	0.02	0.024	0.024
W.V.	10	16	25	35	50	63	100	160	200	250	350	400	450																	
Tan.θ	0.20	0.16	0.14	0.12	0.10	0.10	0.02	0.02	0.02	0.02	0.02	0.024	0.024																	
Load Test	After 1000 hours application of W.V. at +85 °C the capacitor shall meet the following limits: <table border="1"> <tr> <td>Capacitance Change</td> <td>≤ ±20% of initial value</td> </tr> <tr> <td>Tan.θ</td> <td>≤200% of initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>≤Initial specified value</td> </tr> </table>		Capacitance Change	≤ ±20% of initial value	Tan.θ	≤200% of initial specified value	Leakage Current	≤Initial specified value																						
Capacitance Change	≤ ±20% of initial value																													
Tan.θ	≤200% of initial specified value																													
Leakage Current	≤Initial specified value																													
Shelf Test	After 1000 hours without voltage applied at +85 °C the capacitor shall meet the following limits: <table border="1"> <tr> <td>Capacitance Change</td> <td>≤ ±20% of initial value</td> </tr> <tr> <td>Tan.θ</td> <td>≤200% of initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>≤200% of initial specified value</td> </tr> </table>		Capacitance Change	≤ ±20% of initial value	Tan.θ	≤200% of initial specified value	Leakage Current	≤200% of initial specified value																						
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Tan.θ	≤200% of initial specified value																													
Leakage Current	≤200% of initial specified value																													

SM Series

Dimensions

DxL(mm)

μF \ V	10	16	25	35	50	63	100
0.47	-	-	-	-	5x11	5x11	5x11
1	-	-	-	-	5x11	5x11	5x11
2.2	-	-	-	-	5x11	5x11	5x11
3.3	-	-	-	-	5x11	5x11	5x11
4.7	-	-	-	-	5x11	5x11	5x11
10	-	5x11	5x11	5x11	5x11	5x11	6x11
22	-	5x11	5x11	5x11	5x11	6x12	8x11.5
33	5x11	5x11	5x11	5x11	6x12	8x12	10x12.5
47	5x11	5x11	5x11	6x12	6x12	8x12	10x17
100	5x11	5x11	6x12	8x12	8x14	10x17	13x21
220	6x12	6x12	8x12	8x14	10x17	10x21	16x26
330	6x12	8x12	8x14	10x17	10x21	13x21	16x33
470	8x12	8x12/8x14	8x14	10x21	13x21	13x24	18x36
1000	8x14	10x17	10x21	13x26	16x25	16x36	22x36
2200	10x17	10x21	13x21	16x25	18x36	22x36	-
3300	13x21	13x21	16x25	16x36	20x36	-	-
4700	16x25	16x25	16x30	18x36	-	-	-
6800	16x30	18x36	18x40	-	-	-	-
10000	18x36	18x40	-	-	-	-	-

μF \ V	160	200	250	350	400	450
0.47	5x11	5x11	5x11	5x11	6.3x11	6.3x11
1	5x11	6.3x11	6.3x11	8x12	8x12	8x12
2.2	6.3x11	6.3x11	8x12	10x12	10x12	10x16
3.3	8x12	8x12	10x12	10x12	10x12	10x16
4.7	8x12	10x12	10x12	10x16	10x16	10x20
10	10x12	10x12	10x16	10x16	10x20	13x25
22	10x16	10x20	10x20	13x20	13x20	13x25
33	10x20	10x20	13x20	16x32	16x32	16x32
47	13x20	13x20	13x25	16x32	16x32	18x36
100	13x25	13x25	16x32	-	22x31	-
220	16x36	16x36	18x40	-	-	-

SM Series

Permissible Ripple Current mA RMS Maximum at 120Hz 85°C

V μF	10	16	25	35	50	63	100
0.47	-	-	-	-	10	10	10
1	-	-	-	-	15	15	18
2.2	-	-	-	-	18	18	25
3.3	-	-	-	-	25	25	33
4.7	-	-	-	30	30	35	40
10	-	40	45	49	54	58	69
22	-	60	60	70	81	98	110
33	65	70	80	90	110	120	160
47	75	90	100	110	120	150	210
100	130	140	150	190	230	260	320
220	190	240	260	330	400	460	550
330	270	330	380	440	500	650	710
470	350	420	480	550	720	830	900
1000	560	680	850	950	1050	1150	-
2200	1050	1150	1300	1400	1570	1715	-
3300	1250	1400	1560	1670	1720	-	-
4700	1450	1650	1770	1805	-	-	-
6800	1700	1870	1970	-	-	-	-
10000	2200	2310	-	-	-	-	-

V μF	160	200	250	350	400	450
0.47	12	12	12	18	18	19
1	17	17	17	18	18	19
2.2	26	26	30	28	28	29
3.3	35	35	35	35	35	35
4.7	40	45	45	40	45	50
10	65	70	70	70	70	75
22	110	110	120	110	110	110
33	150	150	150	140	140	140
47	180	180	190	180	170	160
100	270	280	290	-	310	-
470	440	480	-	-	-	-