

MINIATURE SIZE

SM Series Standard, Miniature Sized

JAMICON®

- One rank smaller case sizes than SK series .
- SM series has high value of CV for general purposes .

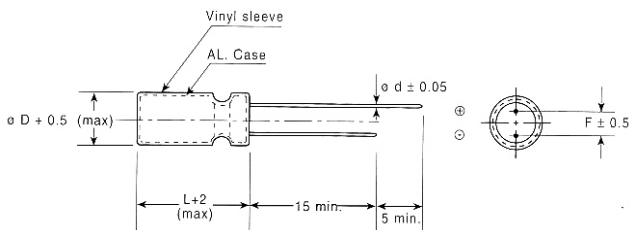


SPECIFICATION

Item	Characteristic																								
Operation Temperature Range	-40 ~ +85°C																								
Rated working Voltage	6.3 ~ 100VDC																								
Capacitance Tolerance (120Hz 25°C)	±20%(M)																								
Leakage Current (25°C)	$I \leq 0.03CV$ or $4 (\mu A)$ Whichever is greater after 3 minutes I: Leakage Current (μA) C: Rated Capacitance(μF) V: Working Voltage (V)																								
Surge Voltage (25°C)	<table border="1"> <tr> <td>W.V.</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>S.V.</td> <td>8</td> <td>13</td> <td>20</td> <td>32</td> <td>44</td> <td>63</td> <td>79</td> <td>125</td> </tr> </table>	W.V.	6.3	10	16	25	35	50	63	100	S.V.	8	13	20	32	44	63	79	125						
W.V.	6.3	10	16	25	35	50	63	100																	
S.V.	8	13	20	32	44	63	79	125																	
Dissipation Factor ($\tan \delta$) (120Hz 25°C)	Add 0.02 per 1000 μF for more than 1000 μF <table border="1"> <tr> <td>W.V.</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>$\tan \delta$</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> </tr> </table>	W.V.	6.3	10	16	25	35	50	63	100	$\tan \delta$	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08						
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$\tan \delta$	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08																	
Low Temperature Stability	Impedance ratio at 120Hz <table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63~100</td> </tr> <tr> <td>-25°C/+25°C</td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>-40°C/+25°C</td> <td>12</td> <td>10</td> <td>8</td> <td>5</td> <td>4</td> <td>4</td> <td>3</td> </tr> </table>	Rated Voltage (V)	6.3	10	16	25	35	50	63~100	-25°C/+25°C	5	4	3	2	2	2	2	-40°C/+25°C	12	10	8	5	4	4	3
Rated Voltage (V)	6.3	10	16	25	35	50	63~100																		
-25°C/+25°C	5	4	3	2	2	2	2																		
-40°C/+25°C	12	10	8	5	4	4	3																		
Load Life	After 1000 hours application of WV at +85°C, the capacitor shall meet the following limits. <table border="1"> <tr> <td>Capacitance Change</td> <td>$\leq \pm 20\%$ of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>$\leq 150\%$ of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>\leq initial specified value</td> </tr> </table>	Capacitance Change	$\leq \pm 20\%$ of initial value	Dissipation Factor	$\leq 150\%$ of initial specified value	Leakage current	\leq initial specified value																		
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Shelf Life	At +85°C no voltage application after 1000 hours and then through the aging treatment (reference JIS C 5102 4.4) , the capacitor shall meet the following limits. <table border="1"> <tr> <td>Capacitance Change</td> <td>$\leq \pm 20\%$ of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>$\leq 200\%$ of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>$\leq 200\%$ of initial specified value</td> </tr> </table>	Capacitance Change	$\leq \pm 20\%$ of initial value	Dissipation Factor	$\leq 200\%$ of initial specified value	Leakage current	$\leq 200\%$ of initial specified value																		
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Reference Standard	JIS C 5102																								

DIMENSIONS (mm)

ϕD	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8



RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	65	75	85
Multiplier	1.25	1.14	1.00

Frequency(Hz)	60	120	1K	$\geq 10K$
W.V.	Multiplier			
6.3~25V	0.85	1.00	1.10	1.20
35~100V	0.80	1.00	1.15	1.25

Case size : DxL (mm)
 Max ripple current : mA (rms)
 (R.C.) : 85°C 120Hz

● CASE SIZE & MAX RIPPLE CURRENT

μF	V(Code) Code	Item	6.3 (0J)		10 (1A)		16 (1C)	
			Dx L	R.C.	Dx L	R.C.	Dx L	R.C.
100	101				→	5x11	150	
220	221		5x11	180	5x11	200	6.3x11	240
330	331		6.3x11	250	6.3x11	270	8x11	340
470	471		6.3x11	300	6.3x11	330	8x11	410
1000	102		8x11	500	10x13	600	10x16	710
2200	222		10x21	790	10x21	1040	13x21	1240
3300	332		10x21	1150	13x21	1340	13x26	1590
4700	472		13x21	1430	13x26	1670	16x25	1730
6800	682		13x26	1790	16x25	1830	16x32	2170
10000	103		16x25	1940	16x35	2350	18x35	2640
15000	153		16x35	2490	18x35	2760		
22000	223		18x42	3220				

All blank voltage on sleeve marking is the same voltage as " → " point to.

μF	V(Code) Code	Item	25 (1E)		35 (1V)		50 (1H)	
			Dx L	R.C.	Dx L	R.C.	Dx L	R.C.
22	220			→	5x11	80	5x11	90
33	330			→	5x11	100	5x11	110
47	470			→	5x11	120	6.3x11	150
100	101		6.3x11	180	6.3x11	200	8x11	240
220	221		8x11	310	8x11	330	10x13	390
330	331		8x11	380	10x13	450	10x16	530
470	471		10x13	500	10x16	580	10x21	710
1000	102		10x21	900	13x21	1050	13x26	1240
2200	222		13x26	1500	16x25	1540	16x35	1910
3300	332		16x25	1690	16x35	2060	18x35	2330
4700	472		16x32	2090	18x35	2430		
6800	682		18x35	2580				

μF	V(Code) Code	Item	63 (1J)		100 (2A)	
			Dx L	R.C.	Dx L	R.C.
10	100		5x11	65	6.3x11	80
22	220		5x11	95	6.3x11	120
33	330		6.3x11	130	8x11	170
47	470		6.3x11	160	10x13	220
100	101		10x13	290	10x21	400
220	221		10x16	470	13x26	710
330	331		10x21	650	13x26	870
470	471		13x21	850	16x25	1010
1000	102		16x25	1310	18x42	1970