

# RADIAL TYPE

# SM

Series

Standard, Miniature Sized

JAMICON®

SK ← SM → TK

- 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 20°C)	±20%(M)										
Leakage Current (20°C)	$I \leq 0.03CV$ or $4 (\mu A)$					I : Leakage Current ( $\mu A$ )					
	*Whichever is greater after 3 minutes					C : Rated Capacitance ( $\mu F$ )					
						V : Working Voltage (V)					
Surge Voltage (20°C)	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 20°C)	Add 0.02 per 1000 $\mu F$ for more than 1000 $\mu F$										
	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		
Low Temperature Stability	Impedance ratio at 120Hz										
	Rated Voltage (V)		6.3	10	16	25	35	50	63	100	
	-25°C / +20°C		5	4	3	2	2	2	2	2	
	-40°C / +20°C		12	10	8	5	4	4	3	3	
Load Life	After 1000 hours application of W.V. at +85°C, the capacitor shall meet the following limits.										
	Capacitance Change	$\leq \pm 20\%$ of initial value									
	Dissipation Factor	$\leq 150\%$ of initial specified value									
	Leakage current	$\leq$ initial specified value									
Shelf Life	At +85°C no voltage application after 1000 hours the capacitor shall meet the following limits. (with voltage treatment)										
	Capacitance Change	$\leq \pm 20\%$ of initial value									
	Dissipation Factor	$\leq 200\%$ of initial specified value									
	Leakage current	$\leq 200\%$ of initial specified value									

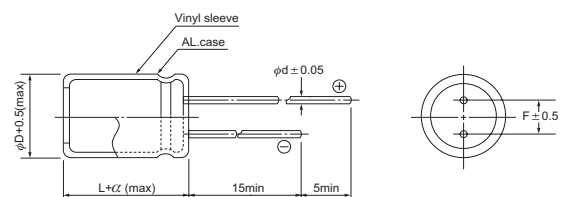
## ● DIMENSIONS (mm)

$\phi D$	5	6.3	8	10	12.5	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
$\alpha$	1.5	1.5	1.5	1.5	1.5	1.5	1.5

## ● 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 & MAX RIPPLE CURRENT

Case size : D x L (mm)  
Max ripple current : mA(rms) 85°C 120Hz

μF	V(Code)		6.3 (0J)		10 (1A)		16 (1C)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	R.C.
100	101					→	5x11	150
220	221		5x11	180	5x11	200	6.3x11	240
330	331		6.3x11	250	6.3x11	270	8x11.5	350
470	471		6.3x11	300	6.3x11	330	8x11.5	420
1000	102		8x11.5	510	10x12.5	590	10x16	710
2200	222		10x20	950	10x20	1020	12.5x20	1180
3300	332		10x20	1130	12.5x20	1290	12.5x25	1530
4700	472		12.5x20	1370	12.5x25	1610	16x25	1730
6800	682		12.5x25	1700	16x25	1830	16x31.5	2150
10000	103		16x25	1940	16x35.5	2360	18x35.5	2650
15000	153		16x35.5	2510	18x35.5	2780		
22000	223		18x40	3150				

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

μF	V(Code)		25 (1E)		35 (1V)		50 (1H)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	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	8x11.5	250
220	221		8x11.5	320	8x11.5	340	10x12.5	390
330	331		8x11.5	390	10x12.5	440	10x16	530
470	471		10x12.5	490	10x16	580	10x20	690
1000	102		10x20	880	12.5x20	1000	12.5x25	1190
2200	222		12.5x25	1440	16x25	1540	16x35.5	1920
3300	332		16x25	1690	16x35.5	2070	18x35.5	2350
4700	472		16x31.5	2080	18x35.5	2450		
6800	682		18x35.5	2600				

μF	V(Code)		63 (1J)		100 (2A)	
	Code	Item	DxL	R.C.	DxL	R.C.
10	100		5x11	65	6.3x11	80
22	220		5x11	95	6.3x11	120
33	330		6.3x11	130	8x11.5	170
47	470		6.3x11	160	10x12.5	220
100	101		10x12.5	290	10x20	390
220	221		10x16	470	12.5x25	680
330	331		10x20	640	12.5x25	840
470	471		12.5x20	810	16x25	1010
1000	102		16x25	1310	18x40	1930