

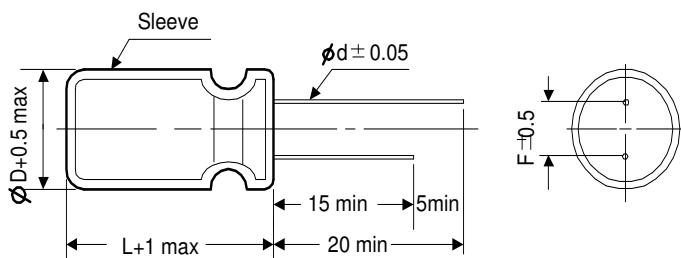
# SM Series – Miniature Size Type

Most Suitable for high-density electronic equipment, such as: machines, car stereo etc.

## Specifications

Item	Characteristic							
Capacitance Tolerance (120Hz 25°C)	±20%(M)							
Rated Working Voltage	6.3 ~ 63 VDC							
Operation temperature Range	-40~+105°C							
Leakage Current	I≤0.02CV+3uA max. I: leakage Current (uA) C: Rated Capacitance (uF) V: Working Voltage(V) (After 3 minutes application)							
Dissipation Factor (120Hz 25°C) (tan δ)	W.V.	6.3	10	16	25	35	50	63
	tan δ	0.24	0.20	0.17	0.15	0.12	0.10	0.10
Load Life	After 1000 hours application of W.V. At+105°C(the capacitor shall meet the following limits )							
	Capacitance Change	≤ ±20% of initial value						
	Dissipation Factor	≤ 200% of initial specified value						
	Leakage Current	≤ initial specified value						

## ■Dimensions



	4	5	
Ø D	4	5	
F	1.5	2.0	2.5
Ø d	0.45	0.5	0.5

(unit:mm)

## ■Size list

(Ø D xL mm)

uF	W.V.	6.3	10	16	25	35	50	63
	S.V.	8	13	20	32	44	63	79
0.1 ~ 2.2							4x7	4x7
3.3							4x7	5x7
4.7					4x7	4x7	4x7	5x7
10				4x7	4x7	4x7	5x7	
22	4x7	4x7	4x7	4x7	4x7	5x7	6x8	
33	4x7	4x7	4x7	4x7	5x7	6x8	6x8	
47	4x7	4x7	5x7	6x7				
100	5x7	6x7	6x7	6x7				
220	6x7	6x7	6x7					

## ■Equivalent Series Resistance

E.S.R..(Ω)25°C/120Hz

W.V.	6.3	10	16	25	35	50	63
0.1						457.86	1657.86
0.22						753.57	753.57
0.33						502.38	502.38
1						165.79	165.79
2.2						75.36	75.36
3.3						50.24	50.24
4.7				52.91	42.33	35.27	35.27
10			28.18	24.87	19.89	16.58	16.58
22	18.09	15.07	12.81	11.30	9.04	7.54	
33	12.06	10.05	8.54	7.54	6.03		
47	8.47	7.05	6.00	5.27			
100	3.98	3.32	2.82				
220	1.81	1.51	1.29				

## ■Maximum Ripple Current

mA(rms)85°C/120Hz

W.V.	6.3	10	16	25	35	50	63
0.1						3.5	3.5
0.22						5.8	5.8
0.33						6.2	6.2
1						11	11
2.2						16	16
3.3						20	23
4.7				19	22	27	31
10			26	32	36	45	
22	33	36	44	54	60	66	
33	46	50	62	66	71	78	
47	54	68	74	82			
100	91	100	110				
220	155	169	201				