

# SS Series

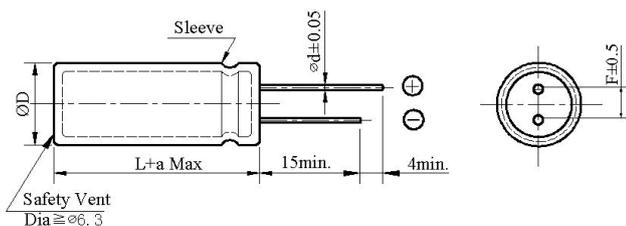
- Low profile with 5mm height
- Load life 1,000 hours at 105°C
- RoHS Compliant



## ◆ SPECIFICATIONS

Item	Performance Characteristics
Category Temperature Range	-40 ~ +105°C
Working Voltage Range	6.3 ~ 50Vdc
Capacitance Range	0.1 ~ 100 μF
Capacitance Tolerance	±20% (at 20°C and 120Hz)
Dissipation Factor (tanδ) (at 20°C, 120Hz)	Rated Voltage (V)    6.3    10    16    25    35    50
	Tanδ(Max)            0.22   0.19   0.16   0.14   0.12   0.10
Leakage Current	$I \leq 0.01CV$ or $3\mu A$ , whichever is greater. I : Leakage current (μA)    C : Rated capacitance (μF)    V : Rated voltage (V)    Impress the rated voltage for 2 minutes
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V)    6.3    10    16    25    35    50
	Z(-25°C)/Z(+20°C)    3       3       2       2       2       2
	Z(-40°C)/Z(+20°C)    8       5       4       3       3       3
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1,000 hours at 105°C.
	Capacitance change $\cong \pm 20\%$ of the initial value
	Dissipation factor(tanδ) $\cong 200\%$ of the specified value
	Leakage current $\cong$ specified value
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 500 hours at 105°C without voltage applied.
	Capacitance change $\cong \pm 20\%$ of the initial value
	Dissipation factor(tanδ) $\cong 200\%$ of the specified value
	Leakage current $\cong 200\%$ of the specified value

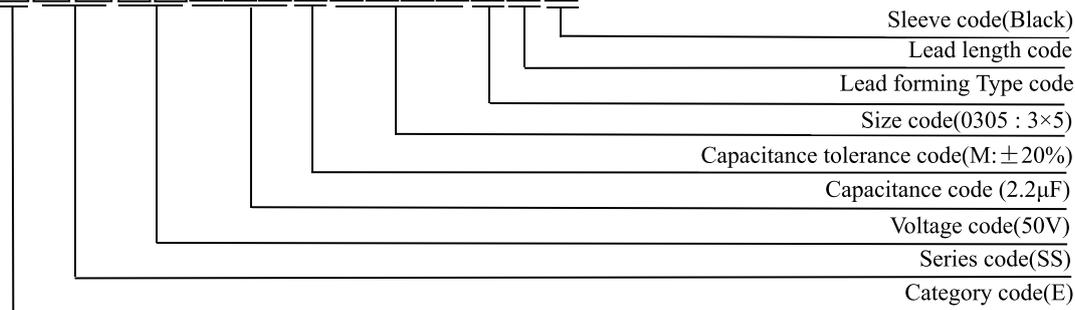
## ◆ DIMENSIONS (mm)



ΦD	3	4	5	6.3
ΦD	ΦD +0.5 Max			
Φd	0.45	0.45	0.45	0.45
F	1.0	1.5	2.0	2.5
a	L+2 Max			

## ◆ PART NUMBER SYSTEM( Example : 50V 2.2μF )

E S S 1 H 2 R 2 M 0 3 0 5 0 0 B



## SS Series

### ◆ Standard Ratings

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max.Rated ripple current mArms@105°C 120Hz
6.3	10	3×5	12
	22	3×5	18
	22	4×5	23
	33	5×5	30
	47	5×5	37
	100	6.3×5	57
10	10	3×5	15
	10	4×5	20
	22	3×5	21
	22	5×5	28
	33	5×5	34
	47	6.3×5	52
16	4.7	3×5	11
	4.7	4×5	15
	10	3×5	18
	10	4×5	23
	22	5×5	31
	33	6.3×5	48
	47	6.3×2	56
25	4.7	3×5	11
	4.7	4×5	15
	10	3×5	15
	10	5×5	22
	22	6.3×5	44
35	3.3	6.3×5	48
	3.3	3×5	10
	3.3	4×5	13
	4.7	3×5	13
35	4.7	4×5	17
	10	5×5	24
	22	6.3×5	48
	22	6.3×5	48

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max.Rated ripple current mArms@105°C 120Hz
50	0.1	3×5	0.8
	0.1	4×5	1.0
	0.22	3×5	1.5
	0.22	4×5	2.0
	0.33	3×5	2.0
	0.33	4×5	3.0
	0.47	3×5	3.0
	0.47	4×5	4.0
	1	3×5	5.0
	1	4×5	8.0
	2.2	3×5	8.0
	2.2	4×5	13
	3.3	3×5	9.0
	3.3	4×5	14
	4.7	5×5	18
	10	6.3×5	28

### ◆ RIRIPPLE CURRENT MULTIPLIERS Frequency Multipliers

Vdc	Frequency (Hz)			
	50/60	120	1K	≥10K
6.3 ~ 16	0.80	1.00	1.30	1.50
25 ~ 35	0.80	1.00	1.20	1.20
50	0.80	1.00	1.15	1.20