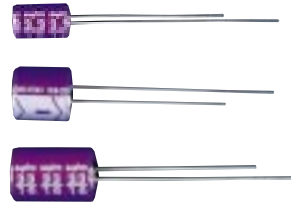


## Standard Products

Designed for general use. Superior high frequency characteristics make capacitors in the SC Series suitable for use in noise limiters and switching power supplies.



# SC

Series

Sleeve color : Purple  
 Marking : Polarity( $\ominus$ ), Rated voltage, Capacitance (White)  
**SANYO, OS-CON**, Lot.No.  
 Max. operating temp.(105°C)

## Specifications

Items	Characteristics		
1. Operating temperature range	-55°C to +105°C		
2. Capacitance tolerance (120Hz)	M : $\pm 20\%$		
3. Tangent of loss angle( $\tan\delta$ ) (120Hz)	Value in Table 1 or less		
4. Leakage current ( $\mu A/2min.$ )(or less) *2	6.3 to 25WV : 0.01CV or 0.5 30WV : 0.02CV or 1.0 (whichever is the greater)		
5. ESR (100k to 300kHz)	Value in Table 1 or less		
6. Temperature characteristics Impedance ratio at 100kHz., +20°C	-55°C	Z / Z <sub>20°C</sub>	1.0 to 1.25
	+105°C	Z / Z <sub>20°C</sub>	0.75 to 1.0
7. High-temperature load 105°C, 2,000Hrs. Rated voltage applied (25WV→20V applied) *1	$\Delta C/C$	Within $\pm 20\%$	
	$\tan\delta$	1.5 times of Item 3 or less	
	Leakage current	Item 4 or less	
8. Moisture resistance (60°C, 90 to 95%RH, 1,000Hrs. no voltage)	$\Delta C/C$	Within $\pm 10\%$	
	$\tan\delta$	1.5 times of Item 3 or less	
	Leakage current	Item 4 or less	
9. Reverse voltage guarantee	Temporary:less than 20% of the rated voltage, Continuous:less than 10% of the rated voltage		

\*1 To use an OS-CON when the operating temperature exceeds 85°C on a component with a rated voltage of 25V, reduce the voltage by 0.25V for every degree(1°C) relative to the value at 85°C(25V).

\*2 If any doubt arises, measure the current after applying voltage(voltage treatment) for 30 minutes at 105°C. The rated voltage should be applied for 6.3 to 16 and 30WV, while a temperature reduction voltage should be applied for 25WV.

## Dimensions

Standards of lead position

(unit : mm)

Size Code	A	B	C	D	E	F
$\phi DXL$	4.0X6.8	5.0X6.8	6.3X6.8	6.3X9.8	8X10.5	10X10.5
F	2.0 $\pm$ 0.5	2.0 $\pm$ 0.5	2.5 $\pm$ 0.5	2.5 $\pm$ 0.5	3.5 $\pm$ 0.5	5.0 $\pm$ 0.5
$\phi d$	0.45	0.45	0.45	0.60	0.60	0.60
G(max.)	0.5	0.5	0.5	0.5	0.8	0.8
K(max.)	0.5	0.5	0.5	0.5	0.8	0.8

## Size List

WV : Rated voltage  
 (SV) : Surge voltage(room temperature)

$\mu F$	WV (SV)	6.3 (7.3)	10 (11.5)	16 (18.4)	25 (25)	30 (34.5)
1.0				A	A	A
1.5				A	A	B
2.2				A	B	B
3.3				A	B	C
4.7			A	B	C	D
6.8	A		B	B	C	D
10	B	B	C	C	C	E
15	B		C	C	D	
22	C	C	C	D	E	F
33	C			D	F	
47	D	D			F	

**Table 1 SC Series Characteristics List**

Size Code	Part Number *1 *2	Rated Voltage (V)	Nominal Capacitance (μF)	ESR *3 (100kHz to 300kHz) (mΩ) (max.)	Maximum allowable ripple current (mA <sub>rms</sub> )*3	Tangent of loss angle (max.)	Leakage current (μA) (max.)*4
A	30SC1M	30	1.0	350	430	0.03	1.00
	25(16)SC1M	25(16)	1.0	350	430	0.03	0.50
	25(16)SC1R5M	25(16)	1.5	300	435	0.03	0.50
	16SC2R2M	16	2.2	280	450	0.04	0.50
	16SC3R3M	16	3.3	280	500	0.04	0.53
	10SC4R7M	10	4.7	280	540	0.05	0.50
	6SC6R8M	6.3	6.8	250	560	0.05	0.50
B	30SC1R5M	30	1.5	300	435	0.03	1.00
	30SC2R2M	30	2.2	250	695	0.03	1.32
	25SC2R2M	25	2.2	200	695	0.03	0.55
	25SC3R3M	25	3.3	200	700	0.03	0.83
	16SC4R7M	16	4.7	180	720	0.04	0.75
	16SC6R8M	16	6.8	150	745	0.04	1.09
	10SC10M	10	10	150	780	0.05	1.00
	6SC10M	6.3	10	150	780	0.05	0.63
	6SC15M	6.3	15	120	815	0.05	0.95
C	30SC3R3M	30	3.3	200	820	0.03	1.98
	25SC4R7M	25	4.7	100	1130	0.03	1.18
	25SC6R8M	25	6.8	100	1140	0.03	1.70
	25SC10M	25	10	90	1150	0.03	2.50
	16SC10M	16	10	90	1150	0.04	1.60
	16SC15M	16	15	90	1230	0.04	2.40
	10SC22M	10	22	70	1270	0.05	2.20
	6SC22M	6.3	22	70	1270	0.05	1.39
	6SC33M	6.3	33	70	1320	0.05	2.08
D	30SC4R7M	30	4.7	120	1300	0.04	2.82
	30SC6R8M	30	6.8	120	1340	0.04	4.08
	25SC15M	25	15	70	1650	0.04	3.75
	16SC22M	16	22	70	1800	0.05	3.52
	16SC33M	16	33	70	1900	0.06	5.28
	10SC47M	10	47	60	2020	0.06	4.70
	6SC47M	6.3	47	60	2020	0.06	2.96
E	30SC10M	30	10	110	1380	0.06	6.00
	25SC22M	25	22	40	2330	0.06	5.50
F	25SC33M	25	33	35	2900	0.06	8.25
	25SC47M	25	47	35	2980	0.06	11.75
	30SC22M	30	22	80	1830	0.06	13.20

\*1 Capacitance tolerance : M ; ±20%, Product "K" (capacitance tolerance : ±10%) is optionally available.

\*2 ( ) : 16SC1M etc.

\*3 100kHz, +45°C

\*4 After 2 minutes

Temperature coefficient for ripple current

Ambient Temp.(°C)	to +45	+65	+85	+95	+105
Coefficient	1.0	0.85	0.7	0.4	0.25