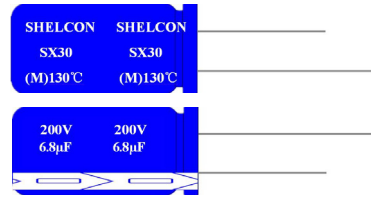


SX30 SERIES

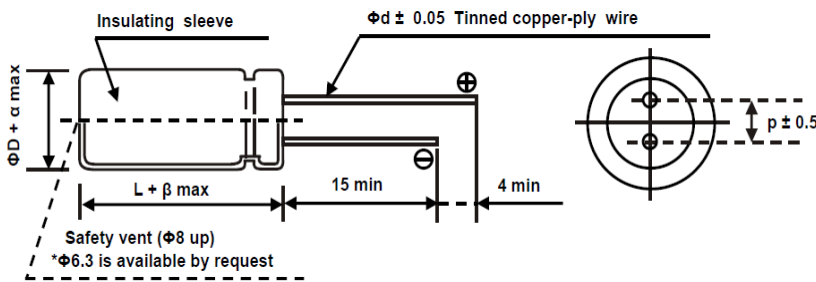


● Load life: 130°C 1000 ~ 4000 Hours.

■ SPECIFICATIONS

Item	Characteristics																										
Operating Temperature Range	-40 ~ +130°C (16 ~ 100V); -25 ~ +130°C (200 ~ 400V)																										
Voltage Range	16 ~ 400 V.DC																										
Nominal Cap. Range	1.0 ~ 4700 µF																										
Capacitance Tolerance	- 20% ~ + 20% (at 20°C, 120Hz)																										
Leakage Current	<table border="1"> <thead> <tr> <th>16V-100V</th> <th>200V-400V</th> </tr> </thead> <tbody> <tr> <td>$I \leq 0.01CV$ whichever is greater (after 2 min)</td> <td>$I = 0.03CV + 15\mu A$ (after 5 min)</td> </tr> </tbody> </table>	16V-100V	200V-400V	$I \leq 0.01CV$ whichever is greater (after 2 min)	$I = 0.03CV + 15\mu A$ (after 5 min)																						
	16V-100V	200V-400V																									
$I \leq 0.01CV$ whichever is greater (after 2 min)	$I = 0.03CV + 15\mu A$ (after 5 min)																										
where, I: Max Leakage Current(µA), C: Nominal Capacitance(µF), V: Rated Voltage(V) (at 20°C)																											
Dissipation Factor (tanδ) (at 120Hz, +20°C)	Capacitance > 1000µF : tanδ increase by 0.02 for each 1000µF from below value																										
	<table border="1"> <thead> <tr> <th>W. V.</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>200</th> <th>400</th> </tr> </thead> <tbody> <tr> <td>tanδ</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.08</td> <td>0.15</td> <td>0.2</td> </tr> </tbody> </table>	W. V.	16	25	35	50	63	100	200	400	tanδ	0.16	0.14	0.12	0.10	0.10	0.08	0.15	0.2								
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W. V.	16	25	35	50	63	100	200	400																			
Z(-25°C)/Z(20°C)	3	2	2	2	2	2	2	6																			
Z(-40°C)/Z(+20°C)	4	3	3	3	3	3	3	8																			
After the following life time, application of DC rated working voltage at 130°C, the capacitor shall meet the following limits: Capacitance change ... $\cong \pm 30\%$ of the initial measured value Tan δ ... $\cong 300\%$ of the initial specified value DC leakage current ... \cong the initial specified value Life Time: 16 ~ 100V: $\Phi 6.3$ 1000 hours; $\Phi 8$ - $\Phi 10$ 2000 hours; $\Phi \geq 13$ 4000 hours; Life Time: 200 ~ 400V: $\Phi 6.3$ 1000 hours; $\Phi 8$ - $\Phi 13$ 2000 hours;																											
High Temp. Non-Load Test	After storage for 1000 hours at 130°C with no voltage applied, voltage treatment of JIS-C-5102 article 4-4 is to be given and then measurement shall be made, at which time requirements specified in the table "High Temperature Loading" can be met.																										

● DRAWING



Unit: (mm)

φD	6.3	8	10	13	16	18
P	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5	0.6	0.6	0.6	0.8	0.8
β	1.5			2.0		
α	0.5					

▼ MULTIPLIER FOR RIPPLE CURRENT

(1) Frequency Multipliers

Freq.(Hz)	60(50)	120	1K	10K	100K
Cap.(µF)					
~ 47	0.35	0.42	0.60	0.80	1.00
100~ 1000	0.45	0.55	0.75	0.90	1.00
2200	0.6	0.70	0.85	0.95	1.00

(2) Temperature coefficient

Ambient Temperature(°C)	40	60	85	105	130
Coefficient	1.60	1.40	1.20	1.10	1.00

SX30 SERIES

STANDARD RATINGS

VV(Vdc) Parameter Cap (µF)	16			25			35			50			63			100		
	ΦDxL (mm)	Ripple Current (mAmps)	Impedance 100KHz/Ω 20°C	ΦDxL (mm)	Ripple Current (mAmps)	Impedance 100KHz/Ω 20°C	ΦDxL (mm)	Ripple Current (mAmps)	Impedance 100KHz/Ω 20°C	ΦDxL (mm)	Ripple Current (mAmps)	Impedance 100KHz/Ω 20°C	ΦDxL (mm)	Ripple Current (mAmps)	Impedance 100KHz/Ω 20°C	ΦDxL (mm)	Ripple Current (mAmps)	Impedance 100KHz/Ω 20°C
1																		
2.2										8x11.5	35	3.00						
3.3										8x11.5	50	2.50						
4.7										8x11.5	70	1.80						
10										8x11.5	100	1.50				8x11.5	100	1.80
22										8x11.5	200	1.30				8x11.5	200	1.00
33										8x11.5	260	1.00				8x11.5	220	0.60
47										8x11.5	300	0.80	8x11.5	250	0.60	10x12.5	260	0.50
100										8x11.5	300	0.60	10x12.5	400	0.50	10x16	330	0.40
220										10x12.5	520	0.50	10x16	450	0.40	13x20	670	0.30
330	8x11.5	360	0.45	10x12.5	620	0.40	10x12.5	620	0.40	10x20	890	0.40	13x20	820	0.30	16x25	1100	0.20
470	10x12.5	620	0.40	10x16	800	0.35	10x20	960	0.30	13x20	1000	0.30	13x25	1000	0.20	16x31.5	1300	0.18
1000	10x20	960	0.35	13x20	1100	0.30	13x25	1430	0.25	16x31.5	2180	0.18	16x31.5	1850	0.16			
1500													18x40	1850	0.14			
2200	13x25	1430	0.30	16x31.5	1800	0.25	16x35.5	2550	0.20	18x40	2800	0.16						
3300	16x31.5	1800	0.25	16x35.5	2550	0.20	18x35.5	2800	0.15									
4700	16x35.5	2550	0.20															

VV(Vdc) Parameter Cap (µF)	200			400		
	ΦDxL (mm)	Ripple Current (mAmps)	Impedance 100KHz/Ω 20°C	ΦDxL (mm)	Ripple Current (mAmps)	Impedance 100KHz/Ω 20°C
1				6.3x11	60	4.5
1.5				8x11.5	65	4.5
				8x16	80	4
1.8				8x11.5	75	3.5
				8x16	85	3.5
2.2				8x11.5	75	3.3
				8x16	90	3.3
				8x20	110	3.3
2.7				8x16	95	3.3
				8x20	115	3.3
3.3				8x16	100	3.2
				8x20	120	3.2
4.7	6.3x11	100	3.0	8x20	120	3.2
	8x11.5	120	2.5	10x16	125	3.2
5.6	8x11.5	130	1.8	10x16	130	3.2
	8x16	180	1.6	10x20	145	3.2
6.8	8x11.5	130	1.5	10x20	150	3
	8x16	180	1.4			
10	8x16	200	1.3			
	8x20	240	1.3			
15	8x16	200	1.2			
	8x20	240	1.2			
22	8x20	240	1.1			
	10x16	240	1.1			
33	10x20	320	1.0			

(mAmps / 130°C. 100KHZ)