

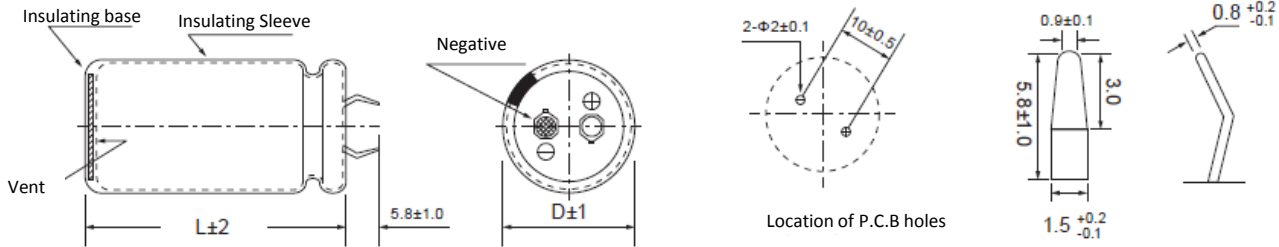
- Endurance: 105°C 10000hours
- Recommended Applications: Smoothing circuit, TV/Monitor,Adapter, SMPS
- Corresponding product to RoHS

LP
 ↑ Long Life
LK

■ SPECIFICATIONS

Item	Characteristics										
Category Temperature Range	-25 ~ +105°C										
Rated Voltage Range	200 ~ 450VDC										
Rated Capacitance Range	39 ~ 1500 μF										
Capacitance Tolerance	± 20 % (120Hz , 20°C)										
Leakage Current (20°C)	$I = \sqrt[3]{CV}$. (After rated voltage applied for 5 minutes) I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)										
Dissipation Factor(MAX) (tan δ) (120Hz ,20°C)	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>WV</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> </tr> <tr> <td>tan δ</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> </tr> </table>	WV	200	250	400	450	tan δ	0.15	0.15	0.20	0.20
WV	200	250	400	450							
tan δ	0.15	0.15	0.20	0.20							
Low Temperature Stability Impedance Ratio (MAX)	Measurement frequency : 120Hz <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Rated voltage(V)</td> <td>200~400</td> <td>450</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>4</td> <td>8</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>—</td> <td>—</td> </tr> </table>	Rated voltage(V)	200~400	450	Z-25°C / Z+20°C	4	8	Z-40°C / Z+20°C	—	—	
Rated voltage(V)	200~400	450									
Z-25°C / Z+20°C	4	8									
Z-40°C / Z+20°C	—	—									
Endurance	After applying rated voltage with rated Ripple current for 10000hrs at 105°C ,when the capacitors are restored to 20°C , the capacitor shall meet the following requirement. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Capacitance change</td> <td>Within ± 20% of initial value</td> </tr> <tr> <td>D.F. (tan δ)</td> <td>Not more than 250% of specified value</td> </tr> <tr> <td>Leakage current</td> <td>Not more than the specified value</td> </tr> </table>	Capacitance change	Within ± 20% of initial value	D.F. (tan δ)	Not more than 250% of specified value	Leakage current	Not more than the specified value				
Capacitance change	Within ± 20% of initial value										
D.F. (tan δ)	Not more than 250% of specified value										
Leakage current	Not more than the specified value										
Shelf Life	After placed at 105°C without voltage applied for 1000 hours,the capacitor shall meet the same requirements as Endurance.										

■ Dimensions [mm]



■ Multiplier for Ripple Current

Freq. (Hz)	60(50)	120	500	1K	≥ 10K
200~250WV	0.80	1.00	1.20	1.30	1.45
315~450WV	0.80	1.00	1.20	1.25	1.40

STANDARD RATINGS

Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size Φ DxL(mm)	tan δ	Ripple current (A/rms105°C) (120Hz)	Rated Voltage (SurageVoltage) (V)	Cap (μF)	Case size Φ DxL(mm)	tan δ	Ripple current (A/rms105°C) (120Hz)
200(250)	220	22x25	0.15	1.00	400(450)	56	22x25	0.20	0.51
	270	22x30	0.15	1.10		68	22x30	0.20	0.56
		25x25	0.15	1.10			25x25	0.20	0.56
	330	22x30	0.15	1.20		82	22x35	0.20	0.64
		25x25	0.15	1.20			25x25	0.20	0.64
	390	22x35	0.15	1.30		100	22x35	0.20	0.69
		25x30	0.15	1.30			25x30	0.20	0.69
		30x25	0.15	1.30			120	22x40	0.20
	470	22x40	0.15	1.40		25x35		0.20	0.75
		25x35	0.15	1.40		30x25		0.20	0.75
		30x30	0.15	1.40		150	22x50	0.20	0.82
	560	22x45	0.15	1.50			25x40	0.20	0.82
		25x35	0.15	1.50			30x30	0.20	0.82
		30x30	0.15	1.50		180	25x45	0.20	0.90
	680	25x40	0.15	1.70			30x35	0.20	0.90
		30x35	0.15	1.70			35x25	0.20	0.90
		820	25x50	0.15		2.00	220	25x50	0.20
	30x40		0.15	2.00		30x40		0.20	1.00
35x30	0.15		2.00	35*30	0.20	1.00			
1000	30x45	0.15	2.20	270	30x45	0.20	1.10		
	35x35	0.15	2.20		35x35	0.20	1.10		
	30x50	0.15	2.30		330	30x50	0.20	1.20	
1200	35x40	0.15	2.30	35x40		0.20	1.20		
	1500	35x50	0.15	2.50	390	35x45	0.20	1.30	
250(300)		180	22x30	0.15	0.90	470	35x50	0.20	1.40
	25x25		0.15	0.90	39	22x25	0.20	0.37	
	220	22x35	0.15	1.00		47	22x30	0.20	0.40
		25x30	0.15	1.00	56	22x35	0.20	0.47	
	270	22x40	0.15	1.10		25x25	0.20	0.47	
		30x25	0.15	1.10	68	22x40	0.20	0.53	
	330	22x45	0.15	1.20		25x30	0.20	0.53	
		25x35	0.15	1.20	82	22x45	0.20	0.56	
		30x30	0.15	1.20		25x35	0.20	0.56	
	390	22x50	0.15	1.30		30x25	0.20	0.56	
		25x40	0.15	1.30	100	22x50	0.20	0.64	
		30x30	0.15	1.30		25x40	0.20	0.64	
	470	25x45	0.15	1.40		30x30	0.20	0.64	
		30x35	0.15	1.40	120	25x45	0.20	0.72	
		35x30	0.15	1.40		30x30	0.20	0.72	
	560	25x50	0.15	1.50		150	25x50	0.20	0.79
		30x40	0.15	1.50	30x40		0.20	0.79	
		35x35	0.15	1.50	35x30		0.20	0.79	
	680	30x45	0.15	1.70	180	30x45	0.20	0.87	
		35x40	0.15	1.70		35x35	0.20	0.87	
	820	30x50	0.15	2.00	220	30x50	0.20	1.00	
		35x45	0.15	2.00		35x40	0.20	1.00	
	1000	35x50	0.15	2.20	270	35x45	0.20	1.19	
						330	35x50	0.20	1.38