

LR

Downsized · Low profile Series

New

- Endurance: 105°C 2000 hours
- Recommended Applications : Applying to switching power supply and other industry/ commercial field
- Corresponding product to RoHS

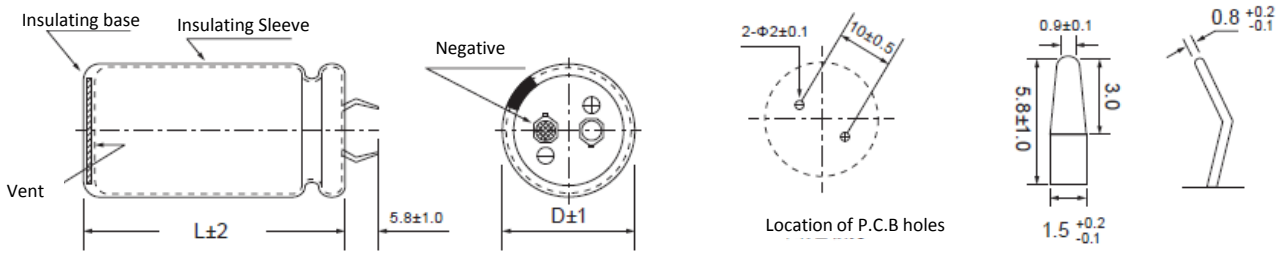
LR
↑ Smaller size
LS



■ SPECIFICATIONS

Item	Characteristics								
Category Temperature Range	-25 ~ +105°C								
Rated Voltage Range	400 ~ 450VDC								
Rated Capacitance Range	120 ~ 1000 µF								
Capacitance Tolerance	± 20 % (120Hz , 20°C)								
Leakage Current (20°C)	$I = 3\sqrt{CV}$. (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"> <tr> <td>WV</td> <td>400</td> <td>420</td> <td>450</td> </tr> <tr> <td>tan δ</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> </tr> </table>	WV	400	420	450	tan δ	0.15	0.20	0.20
WV	400	420	450						
tan δ	0.15	0.20	0.20						
Low Temperature Stability Impedance Ratio (MAX)	Measurement frequency : 120Hz <table border="1"> <tr> <td>WV</td> <td>400</td> <td>420</td> <td>450</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>8</td> <td>8</td> <td>8</td> </tr> </table>	WV	400	420	450	Z-25°C / Z+20°C	8	8	8
WV	400	420	450						
Z-25°C / Z+20°C	8	8	8						
Endurance	After applying rated voltage with rated Ripple current for 2000hrs at 105°C ,the capacitor shall meet the following requirements. <table border="1"> <tr> <td>Capacitance change</td> <td>Within ± 20% of initial value</td> </tr> <tr> <td>D.F. (tan δ)</td> <td>Not more than 200% of specified value</td> </tr> <tr> <td>Leakage current</td> <td>initial specified value or less</td> </tr> </table>	Capacitance change	Within ± 20% of initial value	D.F. (tan δ)	Not more than 200% of specified value	Leakage current	initial specified value or less		
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D.F. (tan δ)	Not more than 200% of specified value								
Leakage current	initial specified value or less								
Shelf Life	After placed at 105°C without voltage applied for 1000 hours,the capacitor shall meet the same requirement as Endurance.								

■ Dimensions [mm]



■ Multiplier for Ripple Current

Freq. (Hz)	50	120	300	1K	10K	≥ 50K
400~450V	0.77	1	1.16	1.30	1.41	1.43

■ STANDARD RATINGS

Rated Voltage (SurageVoltage) (V)	Cap (μ F)	Case size Φ D \times L(mm)	$\tan \delta$	Ripple current (A/rms105°C) (120Hz)	Rated Voltage (SurageVoltage) (V)	Cap (μ F)	Case size Φ D \times L(mm)	$\tan \delta$	Ripple current (A/rms105°C) (120Hz)	
400 (450)	150	22x25	0.15	0.57	420(470)	470	25x50	0.20	1.28	
	180	22x30	0.15	0.68			30x35	0.20	1.22	
	220	22x35	0.15	0.80			35x30	0.20	1.25	
		25x25	0.15	0.75		560	30x40	0.20	1.40	
	270	22x40	0.15	0.94			35x35	0.20	1.45	
		25x30	0.15	0.89		680	30x50	0.20	1.70	
	330	22x45	0.15	1.09			35x40	0.20	1.69	
		25x35	0.15	1.05		820	30x55	0.20	1.95	
		30x25	0.15	1.02			35x45	0.20	1.95	
	390	22x50	0.15	1.25		450 (500)	120	22x25	0.20	0.55
			0.15	1.21	180		22x30	0.20	0.72	
			0.15	1.20	220		25x25	0.20	0.72	
			0.15	1.23			22x35	0.20	0.85	
		470	25x45	0.15	1.40		270	25x30	0.20	0.86
			30x35	0.15	1.40			22x45	0.20	1.06
			560	30x40	0.15		1.62	330	25x35	0.20
	35x30	0.15		1.58	30x25		0.20		0.99	
680	30x45	0.15	1.87	390	22x50		0.20		1.23	
	35x35	0.15	1.85		25x40		0.20	1.19		
820	35x40	0.15	2.14	470	30x30	0.20	1.18			
1000	35x50	0.15	2.50		560	25x45	0.20	1.37		
420(470)	150	22x25	0.20	0.50		680	30x35	0.20	1.36	
		22x30	0.20	0.59			35x30	0.20	1.41	
	180	25x25	0.20	0.59	820		25x50	0.20	1.57	
		22x35	0.20	0.69		30x40	0.20	1.58		
	220	22x40	0.20	0.81	560	35x35	0.20	1.64		
			0.20	0.78		30x45	0.20	1.82		
	270	30x25	0.20	0.80	680	35x40	0.20	1.89		
		22x45	0.20	0.95		30x50	0.2	2.09		
	330	25x35	0.20	0.92	820	35x45	0.20	2.16		
		25x40	0.20	1.05		30x60	0.20	2.49		
390	30x30	0.20	1.04	35x50	0.20	2.51				