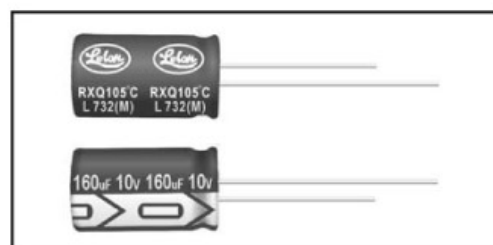


Feature

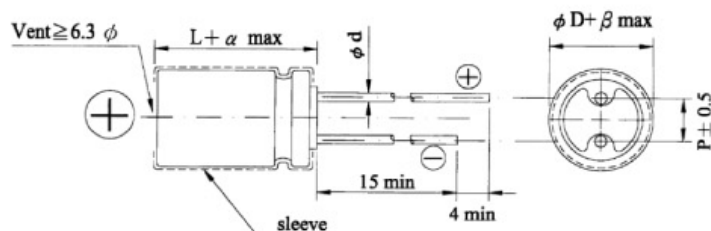
- 105°C, 8,000~10,000 hours assured
- Suitable for switching power supplies, UPS, Ballast
- Smaller case size current
- RoHS Compliance



SPECIFICATIONS

Items	Performance																												
Rated Voltage Range	200 ~ 400V			450V																									
Operating Temperature Range	-40℃ ~ +105℃			-25℃ ~ +105℃																									
Capacitance Tolerance	±20% (at 120Hz, 20℃)																												
Leakage Current (at 20℃)	<table><tr><td>Time</td><td colspan="2">after 1 minutes</td><td colspan="2">after 5 minutes</td></tr><tr><td>Leakage Current</td><td>CV ≤ 1000 I = 0.1CV + 40(μA)</td><td>CV > 1000 I = 0.04CV + 100(μA)</td><td>CV ≤ 1000 I = 0.03CV + 15(μA)</td><td colspan="2">CV > 1000 I = 0.02CV + 25(μA)</td></tr></table> Where, C = rated capacitance in μF V = rated DC working voltage in V						Time	after 1 minutes		after 5 minutes		Leakage Current	CV ≤ 1000 I = 0.1CV + 40(μA)	CV > 1000 I = 0.04CV + 100(μA)	CV ≤ 1000 I = 0.03CV + 15(μA)	CV > 1000 I = 0.02CV + 25(μA)													
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Dissipation Factor (Tan δ at 120Hz, 20℃)	<table><tr><td>Rated Voltage</td><td>160</td><td>200</td><td>250</td><td>350</td><td>400</td><td>450</td></tr><tr><td>Tan δ (max)</td><td>0.20</td><td>0.20</td><td>0.20</td><td>0.24</td><td>0.24</td><td>0.24</td></tr></table>						Rated Voltage	160	200	250	350	400	450	Tan δ (max)	0.20	0.20	0.20	0.24	0.24	0.24									
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Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. <table><tr><td colspan="2">Rated Voltage</td><td>160</td><td>200</td><td>250</td><td>350</td><td>400</td><td>450</td></tr><tr><td rowspan="2">Impedance Ratio</td><td>Z(-25)/Z(+20℃)</td><td>3</td><td>3</td><td>3</td><td>5</td><td>5</td><td>6</td></tr><tr><td>Z(-40)/Z(+20℃)</td><td>6</td><td>6</td><td>6</td><td>6</td><td>6</td><td>-</td></tr></table>						Rated Voltage		160	200	250	350	400	450	Impedance Ratio	Z(-25)/Z(+20℃)	3	3	3	5	5	6	Z(-40)/Z(+20℃)	6	6	6	6	6	-
Rated Voltage		160	200	250	350	400	450																						
Impedance Ratio	Z(-25)/Z(+20℃)	3	3	3	5	5	6																						
	Z(-40)/Z(+20℃)	6	6	6	6	6	-																						
Load Life Test	<table><tr><td>Test Time</td><td>8,000 hrs for ϕ D = 10mm; 10,000 hrs for ϕ D ≥ 12.5mm</td></tr><tr><td>Capacitance Change</td><td>Within ±20% of initial value</td></tr><tr><td>Dissipation Factor</td><td>Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td>Within specified value</td></tr></table> * The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with rated ripple current for 8,000 / 10,000 hrs at 105℃.						Test Time	8,000 hrs for ϕ D = 10mm; 10,000 hrs for ϕ D ≥ 12.5mm	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value															
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Shelf Life Test	<table><tr><td>Capacitance Change</td><td>With in ±20% of initial value</td></tr><tr><td>Dissipation Factor</td><td>Less than 200% of specified value</td></tr><tr><td>Leakage Current</td><td>Less than 500% of specified value</td></tr></table> * The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hrs at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).						Capacitance Change	With in ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Less than 500% of specified value																	
Capacitance Change	With in ±20% of initial value																												
Dissipation Factor	Less than 200% of specified value																												
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Ripple Current & Frequency Multipliers	<table><tr><td>Freg.(HZ)</td><td>120</td><td>1K</td><td>10K</td><td>100K up</td></tr><tr><td>Multipliers</td><td>0.4</td><td>0.68</td><td>0.90</td><td>1.0</td></tr></table>						Freg.(HZ)	120	1K	10K	100K up	Multipliers	0.4	0.68	0.90	1.0													
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DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

ϕ D	10	12.5	16	18
P	5.0		7.5	
ϕ d	0.6		0.8	
α	1.5			
β	0.5			

DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension: $\phi D \times L(\text{mm})$

Ripple Current: mA/rms at 105°C

μF	VDC Contents	160V (2C)				200V (2D)				250V (2E)				350V (2V)				400V (2G)			
		$\phi D \times L$		Ripple Current		$\phi D \times L$		Ripple Current		$\phi D \times L$		Ripple Current		$\phi D \times L$		Ripple Current		$\phi D \times L$		Ripple Current	
				120Hz	100KHz			120Hz	100KHz			120Hz	100KHz			120Hz	100KHz			120Hz	100KHz
6.8														10×16	110	275		10×16	110	275	
10		10×16	125	315		10×16	125	315		10×20	140	350		10×20	140	350		10×20	140	350	
22		10×20	200	500		10×20	200	500		10×20	200	500		12.5×20	260	650		12.5×20	260	650	
33		10×20	250	625		10×20	260	650		12.5×20	320	800		16×20	360	900		16×20	360	900	
47														16×20	430	1,075		16×25	470	1,175	
		10×20	300	750		12.5×20	390	975		12.5×20	390	975						18×20	450	1,125	
68		12.5×20	470	1,175		12.5×20	470	1,175		16×20	520	1,300		16×25	560	1,400		18×25	585	1,465	
														18×20	550	1,375					
82		12.5×20	510	1,275		16×20	550	1,375		16×20	550	1,375		18×25	610	1,525		18×25	610	1,525	
100		12.5×25	620	1,395		16×20	630	1,420		16×25	680	1,530		18×25	700	1,575		18×31.5	765	1,720	
		16×20	630	1,420																	
150		16×20	770	1,735		16×25	840	1,890		18×25	860	1,935		18×31.5	830	1,865		18×35.5	865	1,945	
220		16×25	1,020	2,295		18×25	1,050	2,365		18×31.5	1,130	2,545		18×35.5	960	2,160		18×40	985	2,215	
330		18×31.5	1,390	3,130		18×35.5	1,430	3,220													

μF	VDC Contents	450V (2W)			
		$\phi D \times L$		Ripple Current	
				120Hz	100KHz
6.8		10×20	110	275	
10		12.5×20	180	450	
22		16×20	290	725	
33		16×25	390	975	
		18×20	380	950	
47		18×25	480	1,200	
68		18×31.5	630	1,575	
82		18×35.5	715	1,785	
100		18×40	800	1,800	

Remark: The case size of 16×20, 18×20 and 18×25 are used flat type rubber bung