



Aluminum Electrolytic Capacitors

RPL

Features

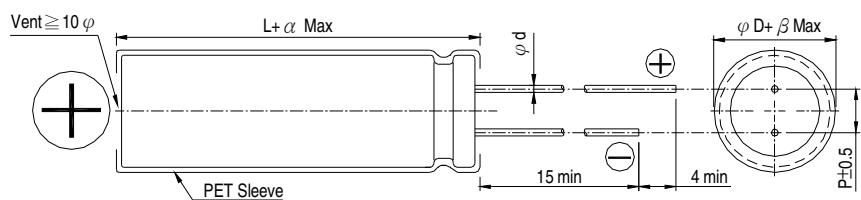
- 105°C, 5,000 hours assured
- $\phi 10 \sim \phi 18$ with large permissible ripple current
- Pen type included
- RoHS Compliance



SPECIFICATIONS

Sleeve & Marking Color: Black & Golden

Items	Performance															
Category Temperature Range	400V		420 ~ 450V													
	-40°C ~ +105°C		-25°C ~ +105°C													
Capacitance Tolerance	$\pm 20\%$															
Leakage Current (at 20°C)	<table border="1"> <thead> <tr> <th>Time</th><th>after 5 minutes</th></tr> </thead> <tbody> <tr> <td>Leakage Current</td><td>$CV \leq 1,000$ $I = 0.03CV + 15(\mu A)$</td></tr> </tbody> </table>		Time	after 5 minutes	Leakage Current	$CV \leq 1,000$ $I = 0.03CV + 15(\mu A)$	$CV > 1,000$ $I = 0.02CV + 25(\mu A)$									
Time	after 5 minutes															
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Where, C = rated capacitance in μF V = rated DC working voltage in V																
Dissipation Factor ($\tan \delta$ at 120Hz, 20°C)	<table border="1"> <thead> <tr> <th>Rated Voltage</th><th>400</th><th>420</th><th>450</th></tr> </thead> <tbody> <tr> <td>$\tan \delta$ (max)</td><td>0.24</td><td>0.24</td><td>0.24</td></tr> </tbody> </table>				Rated Voltage	400	420	450	$\tan \delta$ (max)	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.															
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Impedance Ratio	Z(-25)/Z(+20°C) Z(-40)/Z(+20°C)	5 6	6 -													
Endurance	<table border="1"> <thead> <tr> <th>Test Time</th><th>5,000 Hrs</th></tr> </thead> <tbody> <tr> <td>Capacitance Change</td><td>Within $\pm 20\%$ 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> </tbody> </table>				Test Time	5,000 Hrs	Capacitance Change	Within $\pm 20\%$ of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value				
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* The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 5,000 hours at 105°C.																
Shelf Life Test	<table border="1"> <thead> <tr> <th>Test Time</th><th>1,000 Hrs</th></tr> </thead> <tbody> <tr> <td>Capacitance Change</td><td>With in $\pm 20\%$ 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> </tbody> </table>				Test Time	1,000 Hrs	Capacitance Change	With in $\pm 20\%$ of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value				
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* The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).																
Ripple Current & Frequency Multipliers	<table border="1"> <thead> <tr> <th>Frequency (Hz)</th><th>60</th><th>120</th><th>500</th><th>1k</th><th>10k up</th></tr> </thead> <tbody> <tr> <td>Multipliers</td><td>0.80</td><td>1.00</td><td>1.25</td><td>1.40</td><td>1.50</td></tr> </tbody> </table>				Frequency (Hz)	60	120	500	1k	10k up	Multipliers	0.80	1.00	1.25	1.40	1.50
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DIAGRAM OF DIMENSIONS


Unit: mm

LEAD SPACING AND DIAMETER				
φ D	10	12.5	16	18
P	5.0		7.5	
φ d	0.6			0.8
α	2.5			
β	0.5			

DIMENSION & PERMISSIBLE RIPPLE CURRENT

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

Ripple Current: mA/rms at 105°C

V. DC	Cap. (μ F)	10 ϕ		12.5 ϕ		16 ϕ		18 ϕ		
		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current		$\phi D \times L$	Ripple Current	
			120 Hz	100k Hz		120 Hz	100k Hz		120 Hz	100k Hz
400V (2G)	33	10x35	320	480						
	39	10x40	380	570	12.5x30	380	570			
	47	10x45	425	638				16x25	400	600
	56	10x50	490	735	12.5x35	475	713			
	68				12.5x40	550	825	16x31.5	530	795
	82				12.5x45	615	923	16x35.5	605	908
	100				12.5x50	690	1,035	16x40	740	1,110
	120							16x45	795	1,193
	150									18x45
420V (2P)	33	10x40	350	525						
	39	10x45	390	585	12.5x30	380	570			
	47	10x50	445	668	12.5x35	410	615	16x25	370	555
	56				12.5x40	490	735	16x31.5	475	713
	68				12.5x45	560	840	16x35.5	550	825
	82				12.5x50	625	938	16x40	630	945
	100							16x45	750	1,125
	120							16x50	865	1,298
	150									18x50
450V (2W)	33	10x40	350	525	12.5x30	350	525			
	39	10x45	390	585	12.5x35	400	600	16x25	370	555
	47	10x50	445	668	12.5x40	425	683	16x31.5	455	683
	56				12.5x45	500	750	16x35.5	560	750
	68							16x40	590	885
	82				12.5x50	625	938	16x45	675	1,013
	100							16x50	785	1,178
	120									18x45
	150									18x50

Remark: Other sizes and specification are available, please contact us for detail.