



Aluminum Electrolytic Capacitors

MEK

Features

- Endurance with ripple current: 85°C, 5,000 hours
- RoHS Compliance

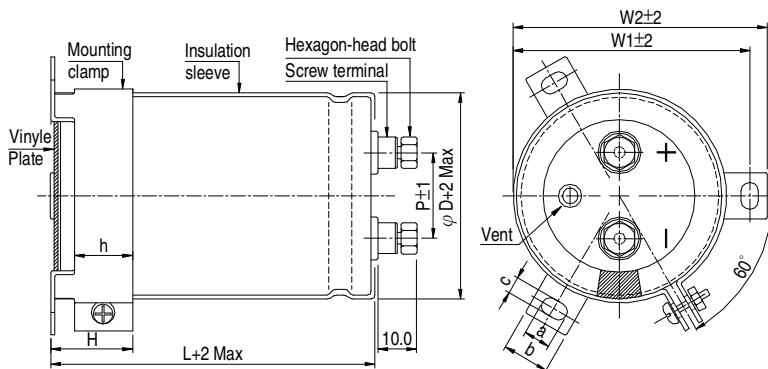


Sleeve & Marking Color: Black & Golden

SPECIFICATIONS

Items	Performance												
Category Temperature Range	-40°C ~ +85°C												
Capacitance Tolerance	±20% (at 120Hz, 20°C)												
Leakage Current (at 20°C)	$I = 3\sqrt{CV}$ or 5 (mA) whichever is smaller (after 5 minutes) Where, C= rated capacitance in μF . V = rated DC working voltage in V.												
Dissipation Factor (Tan δ at 120 Hz, 20°C)	See the Dimensions & Permissible Ripple Current												
Low Temperature Characteristics (at 120Hz)	Capacitance change : $C(-25^\circ\text{C}) / C(+20^\circ\text{C}) \geq 0.7$												
Endurance	<table border="1"> <tr> <td>Test Time</td> <td>5,000 Hrs</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±15% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 175% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table> <p>* The above specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with rated ripple current applied for 5,000 hours at 85°C.</p>	Test Time	5,000 Hrs	Capacitance Change	Within ±15% of initial value	Dissipation Factor	Less than 175% of specified value	Leakage Current	Within specified value				
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Shelf Life Test	<table border="1"> <tr> <td>Test Time</td> <td>1,000 Hrs</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> <p>* The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 85°C without voltage applied. The rated voltage shall be applied to the capacitors before the measurements (Refer to JIS C 5101-4 4.1).</p>	Test Time	1,000 Hrs	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value				
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Ripple Current & Frequency Multipliers	<table border="1"> <tr> <td>Frequency (Hz)</td> <td>50 / 60</td> <td>100 / 120</td> <td>300</td> <td>1k</td> <td>10k up</td> </tr> <tr> <td>Multiplier</td> <td>0.7</td> <td>1.0</td> <td>1.1</td> <td>1.3</td> <td>1.4</td> </tr> </table>	Frequency (Hz)	50 / 60	100 / 120	300	1k	10k up	Multiplier	0.7	1.0	1.1	1.3	1.4
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Ripple Current & Temperature Multipliers	<table border="1"> <tr> <td>Temperature (°C)</td> <td>40</td> <td>60</td> <td>85</td> </tr> <tr> <td>Multiplier</td> <td>1.89</td> <td>1.67</td> <td>1.0</td> </tr> </table>	Temperature (°C)	40	60	85	Multiplier	1.89	1.67	1.0				
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DIAGRAM OF DIMENSIONS



Unit: mm

ϕD	P	W1	W2	H	h	a	b	c
51	22.0	61.0	65.5	21.0	15.0	7.0	12.0	4.5
64	28.6	72.5	78.0	25.0	20.0	7.0	14.0	4.5
77	32.0	85.5	91.0	35.0	20.0	8.0	16.0	4.5
90	32.0	101	106	34.5	20.0	8.0	16.0	5.0

Screw specifications:
 Plus hexagon-headed screw: M5×0.8×10
 Max. screw tightening torque: 3.23Nm



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Dimension: ϕ D×L(mm)

Tan δ : 120 Hz, 20°C

Ripple Current: A/rms at 120 Hz, 85°C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

V. DC Item μ F	350V (2V)				400V (2G)				450V (2W)				500V (2H)			
	Size Code	ϕ D×L	Tan δ	Ripple Current	Size Code	ϕ D×L	Tan δ	Ripple Current	Size Code	ϕ D×L	Tan δ	Ripple Current	Size Code	ϕ D×L	Tan δ	Ripple Current
1,000					B075	51×75	0.15	5.0	B075	51×75	0.15	5.0	B096	51×96	0.20	5.5
1,200	B075	51×75	0.15	5.5	B075	51×75	0.15	5.5	B096	51×96	0.15	6.0	B115 C096	51×115 64×96	0.20 0.20	6.6 6.9
1,500	B075	51×75	0.15	6.1	B096	51×96	0.15	6.7	B115	51×115	0.15	7.2	B130 C096	51×130 64×96	0.20 0.20	7.8 7.7
1,800	B096	51×96	0.15	7.4	B096	51×96	0.15	7.4	B130	51×130	0.15	8.3	C115	64×115	0.20	8.6
2,200	B096	51×96	0.15	8.2	B130	51×130	0.15	9.2	C096	64×96	0.15	9.0	C130	64×130	0.20	9.4
2,700	B130	51×130	0.15	10.2	C096	64×96	0.15	9.9	C115	64×115	0.15	10.7	D115	77×115	0.20	9.9
3,300	B130	51×130	0.15	11.3	C115	64×115	0.15	11.8	C130	64×130	0.15	12.4	D130	77×130	0.20	10.4
3,900	C115	64×115	0.15	12.8	C130	64×130	0.15	13.5	D115	77×115	0.15	13.6	D155	77×155	0.20	11.0
4,700	C130	64×130	0.15	14.8	C155 D115	64×155 77×115	0.15 0.15	15.9 14.9	C195 D130	64×195 77×130	0.15 0.15	17.5 15.6	E130	90×130	0.20	13.5
5,600	C155 D115	64×155 77×115	0.15 0.15	17.3 16.3	C195 D130	64×195 77×130	0.15 0.15	19.1 17.0	D155	77×155	0.15	18.3	E157	90×157	0.20	15.5
6,800	D130	77×130	0.15	18.8	D155	77×155	0.15	20.2	E157	90×157	0.15	21.4				
8,200	D155	77×155	0.15	22.1	E157	90×157	0.15	23.5	E157	90×157	0.15	23.5				
10,000	E157	90×157	0.15	25.9	E157	90×157	0.15	25.9	E196	90×196	0.15	28.3				
12,000	E157	90×157	0.15	28.4	E196	90×196	0.15	31.0	E236	90×236	0.15	33.6				
15,000	E196	90×196	0.15	34.6	E236	90×236	0.15	37.5								
18,000	E236	90×236	0.15	41.4												

V. DC Item μ F	525V (2Y)			
	Size Code	ϕ D×L	Tan δ	Ripple Current
1,000	B115	51×115	0.20	6.7
1,200	B130 C096	51×130 64×96	0.20 0.20	7.6 7.5
1,500	C115	64×115	0.20	8.4
1,800	C130	64×130	0.20	9.1
2,200	D115	77×115	0.20	9.9
2,700	D130	77×130	0.20	10.5
3,300	D155	77×155	0.20	11.2
3,900	E157	90×157	0.20	12.1

*Special requirements are available upon request.

Case Code

Unit: mm

L	ϕ D			
	51	64	77	90
75	B075	-	-	-
96	B096	C096	-	-
115	B115	C115	D115	-
130	B130	C130	D130	-
155	-	C155	D155	-
157	-	-	-	E157
170			D170	
171				E171
195		C195	D195	
196				E196
236				E236

Part numbering system

MEK series 3300 μ F \pm 20% 350V Plain case + Mounting clamp M5 Post 51 ϕ ×130L Pb-free Terminal + PVC Sleeve

MEK **332** **M** **2V** = = **B130**

Series name Capacitance Capacitance tolerance Rated voltage Case Type Terminal type Case size Terminal and Sleeve Type

Example:

Cap.	Symbol
470	471
1,800	182
10,000	103

M = \pm 20%
K = \pm 10%

WV	Symbol
350	2V
400	2G
450	2W

ϕ D×L	Code
51×130	B130
64×130	C130
90×157	E157

For more details, please refer to "Product Code Guide- Screw Type" on page 16.