

ALUMINUM ELECTROLYTIC CAPACITORS

TB series

LONG LIFE 12000~20000HRS

FEATURES

- Ultra Load Life:105°C 12000~20000 hours
- High Ripple Current
- For Electronic Ballast,For Power Supply

SPECIFICATIONS

Item	Performance Characteristics																			
Operating Temperature Range	-25°C ~ +105°C																			
Rated Voltage Range	160V~450W.V																			
Capacitance Range	1~68 μ F																			
Capacitance Tolerance	\pm 20% (20°C, 120Hz)																			
Leakage Current (MAX)	I=0.04CV +100uA(After 2minutes application of rated voltage) I=Leakage Current(uA) , C=Nominal Capacitance(uF) , V=Rated Voltage(V)																			
Dissipation Factor (tan δ)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> <td>MAX</td> </tr> <tr> <td>Tan δ</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> <td>(20°C, 120Hz)</td> </tr> </table>						Rated voltage (V)	160	200	250	400	450	MAX	Tan δ	0.24	0.24	0.24	0.24	0.24	(20°C, 120Hz)
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Low Temperature Stability Impedance Ratio	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> <td>MAX</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>3</td> <td>3</td> <td>6</td> <td>6</td> <td>6</td> <td>(120Hz)</td> </tr> </table>						Rated voltage (V)	160	200	250	400	450	MAX	Z(-25°C)/Z(+20°C)	3	3	6	6	6	(120Hz)
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Load Life	<p>After life test at conditions stated in the table below, the capacitors shall meet the following requirement</p> <table border="1"> <tr> <td>Capacitance Change</td> <td>within \pm30% of the initial value</td> <td>Case Dia</td> <td>Life Time(hrs)</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 300% of the specified value</td> <td>6.3x11 8x9 10x9</td> <td>12000</td> </tr> <tr> <td rowspan="2">Leakage Current</td> <td rowspan="2">Not more than the specified value.</td> <td>8x11.5 10x12.5</td> <td>15000</td> </tr> <tr> <td>10x16 ΦD \geq 12.5</td> <td>20000</td> </tr> </table>						Capacitance Change	within \pm 30% of the initial value	Case Dia	Life Time(hrs)	Dissipation Factor	Not more than 300% of the specified value	6.3x11 8x9 10x9	12000	Leakage Current	Not more than the specified value.	8x11.5 10x12.5	15000	10x16 Φ D \geq 12.5	20000
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Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours and applying voltage according to JIS C-5102 4-3, they meet the specified value for load life characteristics listed above.																			
Standard	According to JIS C 5101																			

MULTIPLIER FOR RIPPLE CURRENT

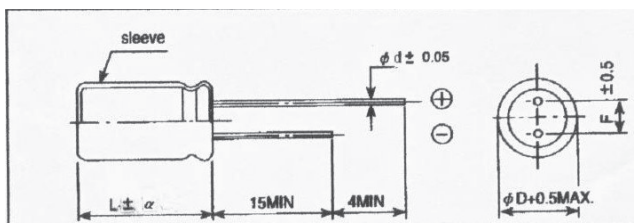
Frequency coefficient

Frequency(Hz)	120	1k	10k	100k \leq
Coefficient	0.7	0.80	0.90	1.00

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DIMENSIONS (mm)

ϕD	6.3	8	10	12.5	16	18
ϕd	0.5	0.6		0.8		
F	2.5	3.5	5.0		7.5	
α	$\alpha = 2.0$					



STANDARD SIZES AND PERMISSIBLE RIPPLE CURRENT

SIZE $\phi D \times L$ (mm)Ripple Current(mA 105°C,120HZ & 100KHZ) r.m.s

W.V	Cap(uF)	160V (2C)		200V (2D)		250V (2E)		400V (2G)		450V (2W)	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1	010							6.3x11	24 120HZ 48 100KHZ		
1.2	1R2							8x9	28 120HZ 56 100KHZ		
1.5	1R5							8x9	30 120HZ 60 100KHZ		
1.8	1R8					6.3x11	33 120HZ 66 100KHZ	8x9	33 120HZ 66 100KHZ		
2.2	2R2			6.3x11	36 120HZ 72 100KHZ	6.3x11	36 120HZ 72 100KHZ	8x9 8x11.5	36 120HZ 80 100KHZ 40 120HZ 80 100KHZ		
2.7	2R7							8x11.5	43 120HZ 86 100KHZ		
3.3	3R3			6.3x11	42 120HZ 84 100KHZ	6.3x11	42 120HZ 84 100KHZ	8x11.5 10x9	47 120HZ 94 100KHZ 48 120HZ 96 100KHZ		
3.9	3R9							10x12.5	57 120HZ 114 100KHZ		
4.7	4R7			6.3x11	49 120HZ 98 100KHZ	8x9	53 120HZ 106 100KHZ	10x12.5	61 120HZ 122 100KHZ	10x16 10x20	54 120HZ 180 100KHZ 66 120HZ 220 100KHZ

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W.V Cap(μ F)		160V (2C)		200V (2D)		250V (2E)		400V (2G)		450V (2W)	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
5.6	5R6	6.3x11	52 120HZ 104 100KHZ	8x9	56 120HZ 112 100KHZ	8x11.5	62 120HZ 124 100KHZ				
6.8	6R8			8x9	62 120HZ 117 100KHZ	8x11.5	68 120HZ 129 100KHZ	10x16	85 120HZ 161 100KHZ	10x20	84 120HZ 280 100KHZ
8.2	8R2			8x9	66 120HZ 125 100KHZ	10x9	76 120HZ 144 100KHZ			10x20	84 120HZ 280 100KHZ
10	100	8x9	70 120HZ 133 100KHZ	8x11.5	80 120HZ 152 100KHZ	10x12.5	90 120HZ 171 100KHZ			12.5x20	135 120HZ 450 100KHZ
12	120	10x9	88 120HZ 167 100KHZ	10x9	88 120HZ 167 100KHZ	10x12.5	90 120HZ 171 100KHZ				
15	150	8x11.5 10x9	92 120HZ 174 100KHZ 95 120HZ 180 100KHZ							12.5x25	180 120HZ 600 100KHZ
18	180			10x12.5	113 120HZ 214 100KHZ	10x16	127 120HZ 241 100KHZ				
22	220	10x12.5	121 120HZ 217 100KHZ							12.5x25 16x20	240 120HZ 600 100KHZ 292 120HZ 730 100KHZ
27	270			10x16	149 120HZ 268 100KHZ						
33	330	10x16	158 120HZ 284 100KHZ							16x25 18x20	392 120HZ 980 100KHZ 312 120HZ 780 100KHZ
47	470									18x25	480 120HZ 1200 100KHZ
68	680									18x31.5	520 120HZ 1300 100KHZ