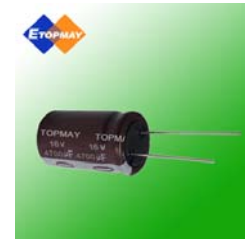




Features

- 125°C, 5000 hours, Long life.
- Designed for energy-saving lamps, automobile modules and other high temperature applications.



◆ Specifications

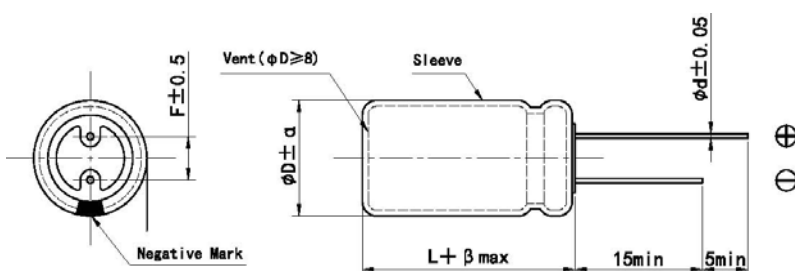
Items	Characteristics																	
Rated Voltage Range	10~400V.DC																	
Operating Temperature Rang	-40°C~125°C																	
Capacitance Tolerance	±20%(M) (25°C, 100 or 120Hz)																	
Leakage Current	$I \leq 0.02CV$ or $3(\mu A)$ After 2 minutes at 25°C. (6.3V~100V) $I \leq 0.03CV + 10(\mu A)$ After 2 minutes at 25°C. (200V~400V) Where, I:Max.leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V)																	
Dissipation Factor (tan δ)	(25°C, 100 or 120Hz) <table border="1" style="margin-left: 20px;"> <tr> <td>Rated voltage(V_{dc})</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50~100</td> <td>200</td> <td>400</td> </tr> <tr> <td>tanδ(Max.)</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.12</td> <td>0.15</td> </tr> </table> When nominal capacitance exceeds 1000 μF , add 0.02 to the value above for each 1000 μF increase.	Rated voltage(V_{dc})	10	16	25	35	50~100	200	400	tan δ (Max.)	0.20	0.16	0.14	0.12	0.10	0.12	0.15	
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Low Temperature Characteristics (Max.Impedance Ratio)	Impedance ratio at 100Hz or 120Hz shall not exceed the values given in the below table. <table border="1" style="margin-left: 20px;"> <tr> <td>Rated voltage(V_{dc})</td> <td>10</td> <td>16~100</td> <td>200</td> <td>400</td> </tr> <tr> <td>$Z_{-40^\circ C} / Z_{+20^\circ C}$</td> <td>6</td> <td>4</td> <td>6</td> <td>10</td> </tr> </table> When nominal capacitance exceeds 1000 μF , add 1 to the value above for each 1000 μF increase.	Rated voltage(V_{dc})	10	16~100	200	400	$Z_{-40^\circ C} / Z_{+20^\circ C}$	6	4	6	10							
Rated voltage(V_{dc})	10	16~100	200	400														
$Z_{-40^\circ C} / Z_{+20^\circ C}$	6	4	6	10														
Shelf Life	After storage at 125°C for 1000 hours, the capacitors shall meet the following requirements. (500 hours for 400V) . <table border="1" style="margin-left: 20px;"> <tr> <td>Capacitance Change</td> <td>$\leq \pm 20\%$ of the initial value</td> </tr> <tr> <td>D.F. (tanδ)</td> <td>$\leq 200\%$ of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>$\leq 500\%$ of the initial specified value</td> </tr> </table>	Capacitance Change	$\leq \pm 20\%$ of the initial value	D.F. (tan δ)	$\leq 200\%$ of the initial specified value	Leakage Current	$\leq 500\%$ of the initial specified value											
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D.F. (tan δ)	$\leq 200\%$ of the initial specified value																	
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Load Life	After application of rated voltage with rated ripple current for the specified period of time at +125°C, the capacitors shall meet the following limits. <table border="1" style="margin-left: 20px;"> <tr> <td>Capacitance Change</td> <td>$\leq \pm 20\%$ of the initial value</td> <td rowspan="4"> <table border="1" style="float: right;"> <tr> <th>Dia.(mm)</th> <th>Life Time</th> </tr> <tr> <td>6.3</td> <td>2000 hours</td> </tr> <tr> <td>8</td> <td>3000 hours</td> </tr> <tr> <td>10</td> <td>4000 hours</td> </tr> <tr> <td>Over 13</td> <td>5000 hours</td> </tr> </table> </td> </tr> <tr> <td>D.F. (tanδ)</td> <td>$\leq 200\%$ of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>\leq the initial specified value</td> </tr> </table>	Capacitance Change	$\leq \pm 20\%$ of the initial value	<table border="1" style="float: right;"> <tr> <th>Dia.(mm)</th> <th>Life Time</th> </tr> <tr> <td>6.3</td> <td>2000 hours</td> </tr> <tr> <td>8</td> <td>3000 hours</td> </tr> <tr> <td>10</td> <td>4000 hours</td> </tr> <tr> <td>Over 13</td> <td>5000 hours</td> </tr> </table>	Dia.(mm)	Life Time	6.3	2000 hours	8	3000 hours	10	4000 hours	Over 13	5000 hours	D.F. (tan δ)	$\leq 200\%$ of the initial specified value	Leakage Current	\leq the initial specified value
Capacitance Change	$\leq \pm 20\%$ of the initial value	<table border="1" style="float: right;"> <tr> <th>Dia.(mm)</th> <th>Life Time</th> </tr> <tr> <td>6.3</td> <td>2000 hours</td> </tr> <tr> <td>8</td> <td>3000 hours</td> </tr> <tr> <td>10</td> <td>4000 hours</td> </tr> <tr> <td>Over 13</td> <td>5000 hours</td> </tr> </table>	Dia.(mm)		Life Time	6.3	2000 hours	8	3000 hours	10	4000 hours	Over 13	5000 hours					
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D.F. (tan δ)	$\leq 200\%$ of the initial specified value																	
Leakage Current	\leq the initial specified value																	
Others	Meet Q/RME 47-2008, GB/T 5993-2003																	

◆ Dimensions

mm

D	6.3	8	10	13	16	18
H	2.5 ₀	3.5	0.6 ₅	0.6	0.8	0.8
α	0.5					
β	1.0	2.0				

◆ Size and Max Ripple Current





TMCE42 Standard Aluminum Electrolytic Capacitor 125°C

Voltage (V)	Capacitance (μF)	Size ΦD×L (mm)	tanδ	Z (Ω, 25°C, 100KHz)	IR (mArms, 125°C, 100KHz)	Volta ge (V)	Capa citanc e (μF)	Size ΦD×L (mm)	tanδ	IR (mArms, 125°C, 100KHz)
10	330	10×12	0.20	0.17	800	200	4.7	6.3×11	0.12	100
	470	10×12	0.20	0.17	800		4.7	8×12	0.12	120
	1000	10×20	0.20	0.094	1300		5.6	8×12	0.12	130
16	220	10×12	0.16	0.17	800		5.6	8×16	0.12	180
	330	10×12	0.16	0.17	800		6.8	8×12	0.12	130
	470	10×16	0.16	0.12	1050		6.8	8×16	0.12	180
25	220	10×12	0.14	0.17	800		10	8×16	0.12	200
	330	10×16	0.14	0.12	1050		10	8×20	0.12	240
	470	10×20	0.14	0.094	1300		15	8×16	0.12	200
35	100	10×12	0.12	0.17	800		15	8×20	0.12	240
	220	10×16	0.12	0.12	1050		22	8×20	0.12	240
	330	10×20	0.12	0.094	1300		22	10×16	0.12	240
50	100	10×12	0.10	0.3	590		33	10×20	0.12	320
	220	10×20	0.10	0.19	970		400	1	6.3×11	0.15
63	33	8×12	0.10	0.40	250			1	8×12	0.15
	47	10×12	0.10	0.27	400	1.5		8×12	0.15	75
	100	10×16	0.10	0.20	450	1.5		8×16	0.15	80
	220	13×20	0.10	0.10	820	1.8		8×12	0.15	75
	330	13×25	0.10	0.072	1000	1.8		8×16	0.15	85
	470	16×25	0.10	0.069	1500	2.2		8×12	0.15	75
	1000	16×30	0.10	0.056	1850	2.2		8×16	0.15	90
	1500	18×40	0.10	0.043	2350	2.2		8×20	0.15	110
100	4.7	8×12	0.10	1.3	100	2.7		8×16	0.15	95
	10	8×12	0.10	1.0	200	2.7		8×20	0.15	115
	22	8×12	0.10	0.67	220	3.3		8×16	0.15	100
	33	10×12	0.10	0.45	260	3.3		8×20	0.15	120
	47	10×16	0.10	0.33	330	4.7		8×20	0.15	120
	100	13×20	0.10	0.17	670	4.7		10×16	0.15	125
	220	16×25	0.10	0.13	1100	5.6	10×16	0.15	130	
	330	16×30	0.10	0.10	1300	5.6	10×20	0.15	145	
	470	18×30	0.10	0.092	1600	6.8	10×20	0.15	150	

Ripple Current Multiplier

Frequency Coefficient



TMCE42 Standard Aluminum Electrolytic Capacitor 125°C

10V~100V:

Frequency (Hz)	100/120	1K	10K	100K
4.7 μ F~100 μ F	0.40	0.75	0.90	1.00
220 μ F~470 μ F	0.50	0.85	0.94	1.00
1000 μ F~1500 μ F	0.60	0.87	0.95	1.00

200V~400V:

Frequency (Hz)	100/120	1K	10K	100K
1 μ F~5.6 μ F	0.20	0.40	0.80	1.00
6.8 μ F~15 μ F	0.30	0.60	0.90	1.00
22 μ F~33 μ F	0.50	0.80	0.90	1.00