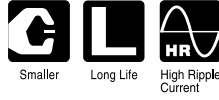


# ALUMINUM ELECTROLYTIC CAPACITORS

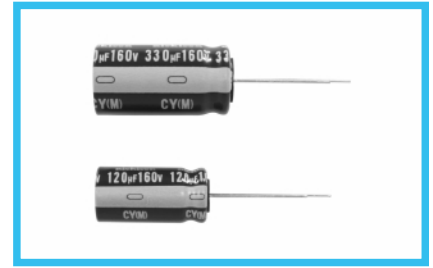
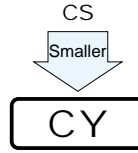
**CY** series

Miniature Sized, High Ripple Current, High Reliability



Upgrade

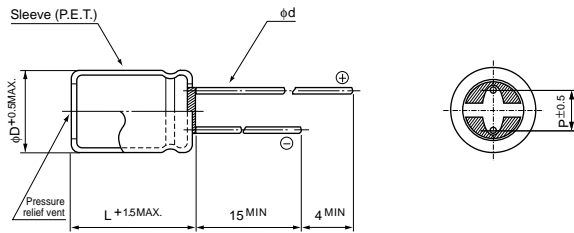
- High ripple current and Long Life product withstanding load life of 10000 to 12000 hours at +105°C.
- Suited for ballast application.
- Compliant to the RoHS directive (2002/95/EC).



## Specifications

Item	Performance Characteristics																																			
Category Temperature Range	-40 to +105°C (160 to 400V), -25 to +105°C (420 to 500V)																																			
Rated Voltage Range	160 to 500V																																			
Rated Capacitance Range	6.8 to 560µF																																			
Capacitance Tolerance	±20% at 120Hz, 20°C																																			
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.04CV+100 (µA)																																			
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C																																			
	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>420</th> <th>450</th> <th>500</th> </tr> </thead> <tbody> <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> <td>0.24</td> <td>0.24</td> </tr> </tbody> </table>	Rated voltage (V)	160	200	250	350	400	420	450	500	tan δ (MAX.)	0.20	0.20	0.20	0.24	0.24	0.24	0.24	0.24																	
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tan δ (MAX.)	0.20	0.20	0.20	0.24	0.24	0.24	0.24	0.24																												
Stability at Low Temperature	Measurement frequency : 120Hz																																			
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Z-25°C / Z+20°C	3	3	3	5	5	6	6	6																												
Z-40°C / Z+20°C	6	6	6	6	6	-	-	-																												
Endurance	<p>The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 12000 hours (10000 hours for 20L or less, 500V) at 105°C, the peak voltage shall not exceed the rated voltage.</p> <table border="1"> <tbody> <tr> <td>Capacitance change</td> <td>Within ±20% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </tbody> </table>	Capacitance change	Within ±20% of the initial capacitance value	tan δ	200% or less than the initial specified value	Leakage current	Less than or equal to the initial specified value																													
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Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.																																			
Marking	Printed with white color letter on dark brown sleeve.																																			

## Radial Lead Type

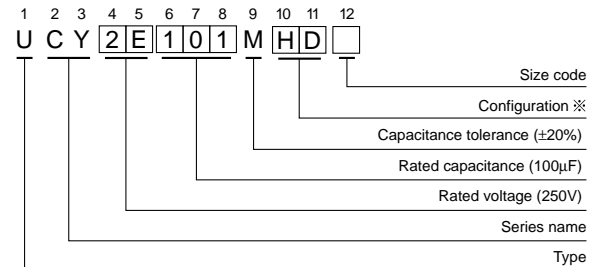


	(mm)			
φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6	0.6 <sup>1)</sup>	0.8	0.8

※ In case L > 25 for the φ12.5 dia. unit, lead dia. φd = 0.8mm.

- Please refer to page 20 about the end seal configuration.

## Type numbering system (Example : 250V 100µF)



※ Configuration

φ D	Pb-free leadwire Pb-free PET sleeve
10	PD
12.5 to 18	HD

Please refer to page 20, 21, 22 about the formed or taped product spec.  
Please refer to page 4 for the minimum order quantity.

- Dimension table in next page.

# ALUMINUM ELECTROLYTIC CAPACITORS



## ■ Dimensions

Cap	V	160		200		250		350		400		420		450		500	
		Code	2C	2D	2E	2V	2G	W6	2W	2H							
6.8	6R8									10 × 16	140	10 × 16	105	10 × 16	105		
10	100									10 × 16	150	10 × 20	135	10 × 20	135	12.5 × 20	160
12	120							10 × 16	160	10 × 20	175	10 × 20	150	10 × 20	150		
15	150							10 × 20	180	10 × 20	180	10 × 25	185	10 × 25	185	12.5 × 25	220
18	180							10 × 20	215	10 × 25	235	10 × 31.5	215	10 × 31.5	215	12.5 × 31.5	240
														▲ 12.5 × 20	255	● 16 × 20	240
22	220			10 × 16	225	10 × 16	225	10 × 25	255	10 × 31.5	275	12.5 × 20	285	12.5 × 25	300	12.5 × 35.5	280
						○ 10 × 20	215	▲ 16 × 25	280								
						● 12.5 × 20	325	● 18 × 20	280								
27	270			10 × 16	235	10 × 20	255	10 × 31.5	305	12.5 × 20	360	12.5 × 25	340	12.5 × 25	340	12.5 × 40	310
						○ 10 × 25	255	▲ 16 × 25	310								
33	330	10 × 16	260	10 × 20	305	10 × 20	305	12.5 × 20	380	12.5 × 25	385	12.5 × 31.5	400	12.5 × 31.5	400	16 × 31.5	350
						● 12.5 × 20	400	● 16 × 20	450	● 16 × 20	450	● 16 × 20	385	● 16 × 20	385	● 18 × 25	350
39	390	10 × 16	295	10 × 20	325	10 × 25	345	12.5 × 25	455	12.5 × 31.5	465	12.5 × 31.5	430	12.5 × 35.5	460	16 × 35.5	380
								○ 12.5 × 25	385	○ 12.5 × 25	385			● 18 × 20	440		
47	470	10 × 20	375	10 × 20	360	10 × 31.5	405	12.5 × 25	510	16 × 20	520	12.5 × 35.5	505	12.5 × 40	525	16 × 40	440
				● 12.5 × 20	490	○ 10 × 25	345	● 16 × 20	540	▲ 12.5 × 31.5	510	▲ 16 × 25	500	▲ 16 × 25	500	▲ 18 × 31.5	440
56	560	10 × 20	380	10 × 25	415	12.5 × 20	515	12.5 × 31.5	590	12.5 × 35.5	630	12.5 × 40	570	16 × 31.5	585	18 × 35.5	480
						▲ 16 × 20	565	▲ 16 × 25	585	▲ 16 × 25	585			● 18 × 25	560		
68	680	10 × 25	455	10 × 31.5	485	12.5 × 25	615	12.5 × 35.5	695	12.5 × 40	720	16 × 31.5	645	16 × 35.5	660	18 × 40	525
		● 12.5 × 20	590	● 12.5 × 20	650	● 16 × 20	650	● 16 × 25	700	○ 16 × 25	640	● 18 × 25	615				
82	820	10 × 31.5	534	12.5 × 25	645	12.5 × 31.5	715	16 × 31.5	740	16 × 31.5	805	16 × 35.5	725	16 × 40	750		
		○ 10 × 25	455	○ 12.5 × 20	645	○ 12.5 × 25	615	▲ 12.5 × 40	785								
		● 12.5 × 20	640	● 16 × 20	690	● 16 × 20	690	○ 16 × 25	700	● 18 × 25	765	▲ 18 × 31.5	730	▲ 18 × 31.5	730		
100	101	12.5 × 20	645	12.5 × 25	695	16 × 20	715	16 × 31.5	825	16 × 35.5	850	16 × 40	825	18 × 35.5	835		
				● 16 × 20	710	▲ 12.5 × 35.5	785	● 18 × 25	790	▲ 18 × 31.5	875	▲ 18 × 35.5	835				
120	121			16 × 20	775	16 × 25	845	16 × 35.5	925	18 × 31.5	940	18 × 40	930	18 × 40	930		
		12.5 × 25	760	▲ 12.5 × 31.5	810	○ 12.5 × 35.5	785	● 12.5 × 40	890	▲ 18 × 31.5	940	▲ 16 × 40	950	▲ 18 × 46	945	▲ 18 × 46	945
150	151	12.5 × 31.5	905	12.5 × 35.5	965	18 × 25	970	18 × 35.5	1080								
		○ 12.5 × 25	760	● 16 × 25	945	▲ 12.5 × 40	990	▲ 16 × 40	1000	18 × 40	1030						
180	181	16 × 20	1000	12.5 × 40	1090	16 × 31.5	1110										
		○ 12.5 × 31.5	905	▲ 16 × 25	1035	▲ 18 × 25	1050	18 × 40	1205	18 × 46	1110						
220	221	12.5 × 40	1200	16 × 31.5	1230	16 × 40	1295										
		○ 12.5 × 35.5	1050	▲ 12.5 × 40	1090	○ 16 × 35.5	1220	18 × 46	1300								
270	271	18 × 25	1235	16 × 35.5	1400	18 × 35.5	1450										
		▲ 12.5 × 40	1300	▲ 18 × 31.5	1410	▲ 16 × 40	1350										
330	331	16 × 31.5	1510	16 × 40	1595	18 × 46	1600										
		▲ 18 × 25	1445	▲ 18 × 31.5	1560	○ 18 × 40	1530										
390	391	16 × 40	1730	18 × 40	1780												
		○ 16 × 35.5	1510	○ 18 × 35.5	1690												
470	471	18 × 35.5	1920	18 × 40	1850												
		▲ 16 × 40	1730	▲ 18 × 46	1900												
560	561	18 × 40	2130														
680	681	18 × 46	2300														Case size φD × L (mm) ※

## ● Frequency coefficient of rated ripple current

Frequency	50Hz	120Hz	1kHz	10kHz	100kHz or more
Coefficient	0.80	1.00	1.60	1.80	2.00

※ : Rated ripple current (mArms) at 105°C 120Hz

▲ : In this case, [6] will be put at 12th digit of type numbering system.

● : In this case, [3] will be put at 12th digit of type numbering system.

○ : In this case, [9] will be put at 12th digit of type numbering system.