

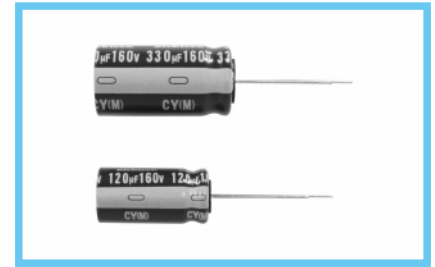
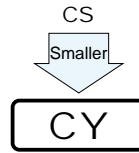
# ALUMINUM ELECTROLYTIC CAPACITORS

**CY** series Miniature Sized, High Ripple Current, High Reliability



**NEW**

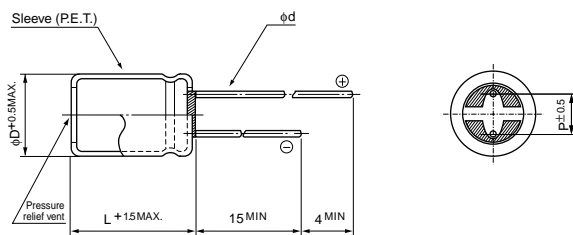
- High ripple current and Long Life product withstanding load life of 8000 to 10000 hours at +105°C.
- Suited for ballast application.
- Adapted to the RoHS directive (2002/95/EC).



## Specifications

Item	Performance Characteristics																		
Category Temperature Range	-40 to +105°C																		
Rated Voltage Range	160 to 400V																		
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)																		
tan δ	Measurement frequency : 120Hz, Temperature : 20°C																		
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> </tr> <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> </tr> </table>	Rated voltage (V)	160	200	250	350	400	tan δ (MAX.)	0.20	0.20	0.20	0.24	0.24						
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tan δ (MAX.)	0.20	0.20	0.20	0.24	0.24														
Stability at Low Temperature	Measurement frequency : 120Hz																		
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> </tr> <tr> <td rowspan="2">Impedance ratio ZT / Z20 (MAX.)</td> <td>Z-25°C / Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>5</td> <td>5</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> </table>	Rated voltage (V)	160	200	250	350	400	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	3	3	3	5	5	Z-40°C / Z+20°C	6	6	6	6
Rated voltage (V)	160	200	250	350	400														
Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	3	3	3	5	5													
	Z-40°C / Z+20°C	6	6	6	6	6													
Endurance	After an application of D.C. bias voltage plus the rated ripple current for 10000 hours (8000 hours for φD =10) at 105°C the peak voltage shall not exceed the rated D.C. voltage, capacitors meet the characteristic requirements listed at right.																		
	<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>tan δ</td> <td>200% or less of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Initial specified value or less</td> </tr> </table>	Capacitance change	Within ±20% of initial value	tan δ	200% or less of initial specified value	Leakage current	Initial specified value or less												
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Leakage current	Initial specified value or less																		
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.																		
Marking	Printed with white color letter on dark brown sleeve.																		

## Radial Lead Type

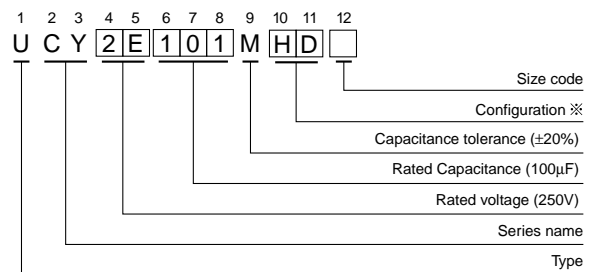


	(mm)			
φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6	0.6*	0.8	0.8

\* In case L > 25 for the φ12.5 dia. unit, lead dia. φ d = 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.

## ■ Dimensions

Cap	V		160		200		250		350		400	
	Code		2C		2D		2E		2V		2G	
6.8	6R8										10 × 16	140
10	100										10 × 16	150
12	120								10 × 16	160	10 × 20	175
15	150								10 × 20	180	10 × 20	180
18	180								10 × 20	215	10 × 25	235
22	220				10 × 16	225	10 × 16	225	10 × 25	255	10 × 31.5	275
27	270				10 × 16	235	10 × 20	255	10 × 31.5	305	12.5 × 20	360
33	330	10 × 16	260	10 × 20	305	● 12.5 × 20	400	● 16 × 20	450	● 16 × 20	450	450
39	390	10 × 16	295	10 × 20	325	10 × 25	345	12.5 × 25	455	12.5 × 31.5	465	465
47	470	10 × 20	375	● 12.5 × 20	490	● 12.5 × 20	490	● 16 × 20	540	● 18 × 20	590	590
56	560	10 × 20	380	10 × 25	415	12.5 × 20	515	12.5 × 31.5	590	● 18 × 20	630	630
								▲ 16 × 20	565	▲ 16 × 25	585	585
68	680	10 × 25	455	10 × 31.5	485	12.5 × 25	615	12.5 × 35.5	695	12.5 × 40	720	720
		● 12.5 × 20	590	● 12.5 × 20	650	● 16 × 20	650	▲ 18 × 20	660	● 18 × 25	735	735
								● 16 × 25	700			
82	820	10 × 31.5	534	12.5 × 25	645	12.5 × 31.5	715	16 × 31.5	740	16 × 31.5	805	805
		● 12.5 × 20	640	● 16 × 20	690	● 16 × 20	690	● 18 × 25	765	● 18 × 25	765	765
								▲ 12.5 × 40	785			
100	101	12.5 × 20	645	12.5 × 25	695	16 × 20	715	16 × 31.5	825	16 × 35.5	850	850
				● 16 × 20	710	▲ 12.5 × 35.5	785	● 18 × 25	790	▲ 18 × 31.5	875	875
120	121	12.5 × 25	760	16 × 20	775	16 × 25	845	16 × 35.5	925			
				▲ 12.5 × 31.5	810	▲ 18 × 20	815	▲ 18 × 31.5	940	18 × 31.5	940	940
						● 12.5 × 40	890					
150	151	12.5 × 31.5	905	12.5 × 35.5	965	18 × 25	970	18 × 35.5	1080	18 × 40	1030	1030
		● 16 × 20	945	▲ 18 × 20	910							
				● 16 × 25	945							
180	181	16 × 20	1000	12.5 × 40	1090	16 × 31.5	1110	18 × 40	1205	18 × 46	1110	1110
		▲ 12.5 × 35.5	1050	▲ 16 × 25	1035	▲ 18 × 25	1050					
220	221	12.5 × 40	1200	16 × 31.5	1230	16 × 40	1295					
		▲ 18 × 20	1105	● 18 × 25	1185							
		● 16 × 25	1185									
270	271	18 × 25	1235	16 × 35.5	1400	18 × 35.5	1450					
				▲ 18 × 31.5	1410							
330	331	16 × 31.5	1510	16 × 40	1595	18 × 46	1600					
		▲ 18 × 25	1445	▲ 18 × 31.5	1560							
390	391	16 × 40	1730	18 × 40	1780							
		▲ 18 × 31.5	1695									
470	471	18 × 35.5	1920									
560	561	18 × 40	2130								Case size φD × L (mm)	※

## ● Frequency coefficient of rated ripple current

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

※: Rated Ripple (mA<sub>rms</sub>) 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.