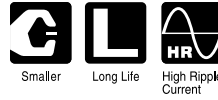
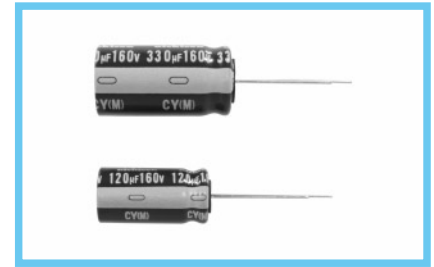
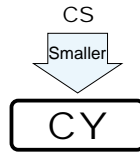


**CY series** Miniature Sized, High Ripple Current, High Reliability



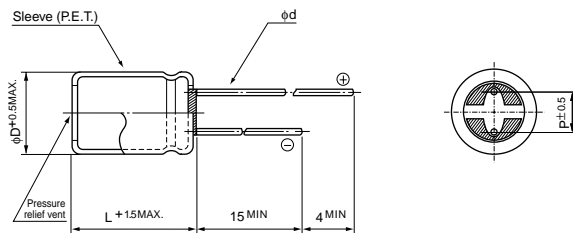
- High ripple current and Long Life product withstanding load life of 8000 to 10000 hours at +105°C.
- Suited for ballast application.
- Adapted to the RoHS directive (2002/95/EC).



## 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)																		
Tangent of loss angle (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						
Rated voltage (V)	160	200	250	350	400														
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	<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 10000 hours (8000 hours for φD=10) at 105°C, the peak voltage shall not exceed the rated voltage.</p> <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>Less than or equal to the initial specified value</td> </tr> </table>	Capacitance change	Within ±20% of initial value	tan δ	200% or less of initial specified value	Leakage current	Less than or equal to the initial specified value												
Capacitance change	Within ±20% of initial value																		
tan δ	200% or less of initial specified value																		
Leakage current	Less than or equal to the initial specified value																		
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

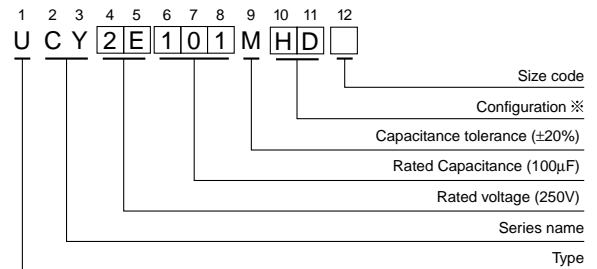


	(mm)			
φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6	0.6*	0.8	0.8

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

## ■ Dimensions

Cap	V Code	160		200		250		350		400	
		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	10 × 20	305	12.5 × 20	380	12.5 × 25	385
39	390	10 × 16	295	10 × 20	325	● 12.5 × 20	400	● 16 × 20	450	● 16 × 20	450
47	470	10 × 20	375	10 × 20	360	10 × 25	345	12.5 × 25	455	12.5 × 31.5	465
56	560	10 × 20	380	10 × 25	415	● 12.5 × 20	490	● 12.5 × 20	490	12.5 × 25	510
68	680	10 × 25	455	10 × 31.5	485	12.5 × 25	615	12.5 × 31.5	510	12.5 × 25	510
82	820	● 12.5 × 20	590	● 12.5 × 20	650	● 16 × 20	650	● 16 × 20	540	● 18 × 20	590
100	101	10 × 20	375	● 12.5 × 20	490	● 12.5 × 20	490	● 16 × 20	540	● 18 × 20	590
120	121	10 × 20	380	10 × 25	415	12.5 × 20	515	12.5 × 31.5	590	12.5 × 35.5	630
150	151	10 × 20	380	10 × 25	415	12.5 × 20	515	▲ 16 × 20	565	● 18 × 20	600
180	181	10 × 25	455	10 × 31.5	485	12.5 × 25	615	▲ 16 × 20	565	▲ 16 × 25	585
220	221	● 12.5 × 20	590	● 12.5 × 20	650	● 16 × 20	650	▲ 18 × 20	660	● 18 × 25	735
270	271	10 × 31.5	534	12.5 × 25	645	12.5 × 31.5	715	● 16 × 25	700		
330	331	● 12.5 × 20	640	● 16 × 20	690	● 16 × 20	690	▲ 12.5 × 40	785	16 × 31.5	805
390	391	10 × 31.5	534	12.5 × 25	645	12.5 × 31.5	715	● 18 × 25	765	● 18 × 25	765
470	471	● 12.5 × 20	640	● 16 × 20	690	● 16 × 20	690	▲ 12.5 × 40	785	▲ 12.5 × 40	785
560	561	12.5 × 20	645	12.5 × 25	695	16 × 20	715	16 × 31.5	825	16 × 35.5	850
680	681	12.5 × 20	645	● 16 × 20	710	▲ 12.5 × 35.5	785	● 18 × 25	790	▲ 18 × 31.5	875
820	821	12.5 × 25	760	16 × 20	775	16 × 25	845	16 × 35.5	925		
1000	1001	12.5 × 25	760	▲ 12.5 × 31.5	810	▲ 18 × 20	815	▲ 18 × 31.5	940	18 × 31.5	940
1200	1201	12.5 × 25	760	▲ 12.5 × 31.5	810	● 12.5 × 40	890				
1500	1501	12.5 × 31.5	905	12.5 × 35.5	965						
1800	1801	● 16 × 20	945	▲ 18 × 20	910	18 × 25	970	18 × 35.5	1080	18 × 40	1030
2200	2201	16 × 20	1000	● 16 × 25	945						
2700	2701	▲ 12.5 × 35.5	1050	▲ 16 × 25	1035	16 × 31.5	1110	18 × 40	1205	18 × 46	1110
3300	3301	12.5 × 40	1200	▲ 18 × 25	1105	▲ 18 × 25	1050				
3900	3901	▲ 18 × 20	1105	16 × 31.5	1230						
4700	4701	● 16 × 25	1185	● 18 × 25	1185	16 × 40	1295				
5600	5601	18 × 25	1235	16 × 35.5	1400						
6800	6801	18 × 25	1235	▲ 18 × 31.5	1410	18 × 35.5	1450				
8200	8201	16 × 31.5	1510	16 × 40	1595	18 × 46	1600				
10000	10001	▲ 18 × 25	1445	▲ 18 × 31.5	1560						
12000	12001	16 × 40	1730	18 × 40	1780						
15000	15001	▲ 18 × 31.5	1695								
18000	18001	18 × 35.5	1920								
22000	22001	18 × 40	2130								
27000	27001									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.