ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

CY

Miniature Sized, High Ripple Current, High Reliability

series

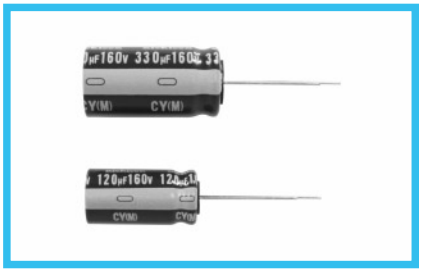
Smaller | Long Life | High Ripple Current

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

CS

Smaller

CY



■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

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					
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

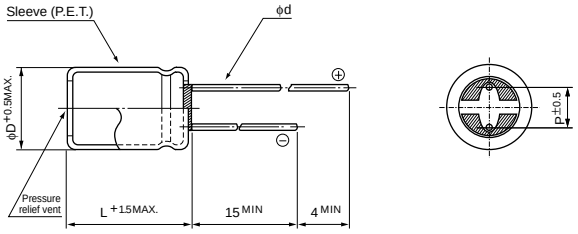
Endurance

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.

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

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※	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 configulation.

Type numbering system (Example : 250V 100µF)

1	2	3	4	5	6	7	8	9	10	11	12
U	C	Y	2	E	1	0	1	M	H	D	

Size code

Configuration ※

Capacitance tolerance (±20%)

Rated capacitance (100µF)

Rated voltage (250V)

Series name

Type

※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.

CY series

■Dimensions

Cap	Code	160 V 2C		200 V 2D		250 V 2E		350 V 2V		400 V 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 ●12.5×20	255 325	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 ●12.5×20	305 400	12.5×20 ●16×20	380 450	12.5×25 ●16×20	385 450
39	390	10×16	295	10×20	325	10×25	345	12.5×25	455	12.5×31.5	465
47	470	10×20	375	10×20 ●12.5×20	360 490	10×31.5 ●12.5×20	405 490	12.5×25 ●16×20	510 540	16×20 ●18×20	520 590
56	560	10×20	380	10×25	415	12.5×20	515	12.5×31.5 ▲16×20	590 565	12.5×35.5 ●18×20 ▲16×25	630 600 585
68	680	10×25 ●12.5×20	455 590	10×31.5 ●12.5×20	485 650	12.5×25 ●16×20	615 650	12.5×35.5 ▲18×20 ●16×25	695 660 700	12.5×40 ●18×25	720 735
82	820	10×31.5 ●12.5×20	534 640	12.5×25 ●16×20	645 690	12.5×31.5 ●16×20	715 690	16×31.5 ●18×25 ▲12.5×40	740 765 785	16×31.5 ●18×25	805 765
100	101	12.5×20	645	12.5×25 ●16×20	695 710	16×20 ▲12.5×35.5	715 785	16×31.5 ●18×25	825 790	16×35.5 ▲18×31.5	850 875
120	121	12.5×25	760	16×20 ▲12.5×31.5	775 810	16×25 ▲18×20 ●12.5×40	845 815 890	16×35.5 ▲18×31.5	925 940	18×31.5	940
150	151	12.5×31.5 ●16×20	905 945	12.5×35.5 ▲18×20 ●16×25	965 910 945	18×25	970	18×35.5	1080	18×40	1030
180	181	16×20 ▲12.5×35.5	1000 1050	12.5×40 ▲16×25	1090 1035	16×31.5 ▲18×25	1110 1050	18×40	1205	18×46	1110
220	221	12.5×40 ▲18×20 ●16×25	1200 1105 1185	16×31.5 ●18×25	1230 1185	16×40	1295				
270	271	18×25	1235	16×35.5 ▲18×31.5	1400 1410	18×35.5	1450				
330	331	16×31.5 ▲18×25	1510 1445	16×40 ▲18×31.5	1595 1560	18×46	1600				
390	391	16×40 ▲18×31.5	1730 1695	18×40	1780						
470	471	18×35.5	1920							Case size φD×L (mm)	※
560	561	18×40	2130								

※: 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.

● 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