

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

CY series

Miniature Sized, High Ripple Current, High Reliability



Smaller

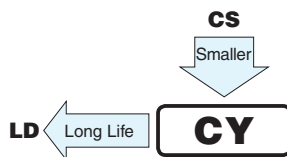


Long Life



High Ripple Current

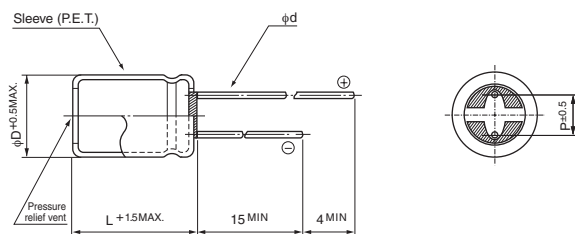
- High ripple current and Long Life product withstanding load life of 10000 to 12000 hours at +105°C.
- Suited for ballast application.
- Compliant to the RoHS directive (2011/65/EU).



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 680μF									
Capacitance Tolerance	± 20% at 120Hz, 20°C									
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.04CV+100 (μA)									
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C									
	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	
Stability at Low Temperature	Measurement frequency : 120Hz									
	Rated voltage (V)		160	200	250	350	400	420	450	500
	Z−25°C / Z+20°C		3	3	3	5	5	6	6	6
	Impedance ratio ZT / Z20 (MAX.)		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 12000 hours (10000 hours for 20L or less, 500V) 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

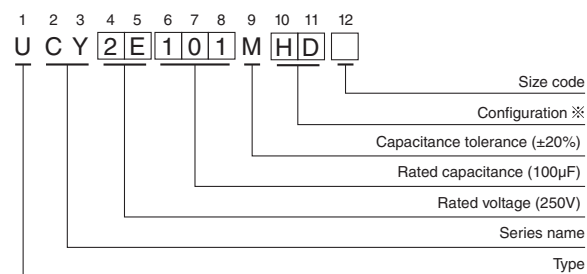


	(mm)			
φD	10	12.5	16	18
P	5.0	5.0	7.5	7.5
φd	0.6	0.6*	0.8	0.8

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

CAT.8100D

■ Dimensions

Cap	Code	V		160		200		250		350		400		420		450		500	
		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	● 16 × 20	220
18	180							10 × 20	215	10 × 25	235	10 × 31.5	215	10 × 31.5	215	12.5 × 31.5	240	● 16 × 20	240
														▲ 12.5 × 20	255				
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	▲ 16 × 25	280
								○ 10 × 20	215							● 18 × 20	280		
								● 12.5 × 20	325										
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	▲ 16 × 25	310
								○ 10 × 25	255										
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	● 18 × 25	350
						● 12.5 × 20	400	● 16 × 20	450	● 16 × 20	450	● 16 × 20	385	● 16 × 20	385				
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					● 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	▲ 18 × 31.5	440
				● 12.5 × 20	490	○ 10 × 25	345	● 16 × 20	540	▲ 12.5 × 31.5	510	▲ 16 × 25	500	▲ 16 × 25	500				
						● 12.5 × 20	490			● 18 × 20	590	● 18 × 20	480						
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			● 18 × 25	560				
										● 18 × 20	600								
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						
								▲ 18 × 20	690	● 18 × 25	735								
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 × 40	785	● 18 × 25	765	▲ 18 × 31.5	730	▲ 18 × 31.5	730		
		● 12.5 × 20	640	● 16 × 20	690	● 16 × 20	690	○ 16 × 25	700	● 18 × 25	765								
								● 18 × 25	765										
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	12.5 × 25	760	16 × 20	775	16 × 25	845	16 × 35.5	925	18 × 31.5	940	18 × 40	930	18 × 40	930				
				▲ 12.5 × 31.5	810	○ 12.5 × 35.5	785	▲ 18 × 31.5	940	▲ 16 × 40	950	▲ 18 × 46	945						
						● 12.5 × 40	890			● 18 × 35.5	960								
						▲ 18 × 20	815												
150	151	12.5 × 31.5	905	12.5 × 35.5	965	18 × 25	970	18 × 35.5	1080	18 × 40	1030								
		○ 12.5 × 25	760	● 16 × 25	945	▲ 12.5 × 40	990	▲ 16 × 40	1000										
		● 16 × 20	945	▲ 18 × 20	910														
180	181	16 × 20	1000	12.5 × 40	1090	16 × 31.5	1110	18 × 40	1205	18 × 46	1110								
		○ 12.5 × 31.5	905	▲ 16 × 25	1035	▲ 18 × 25	1050												
		▲ 12.5 × 35.5	1050	● 18 × 20	910														
220	221	12.5 × 40	1200	16 × 31.5	1230	16 × 40	1295	18 × 46	1300										
		○ 12.5 × 35.5	1050	▲ 12.5 × 40	1090	○ 16 × 35.5	1220												
		● 16 × 25	1185	● 18 × 25	1185	● 18 × 31.5	1160												
		▲ 18 × 20	1105																
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														
		▲ 18 × 31.5	1695																
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 (mA_{rms}) 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.