

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon



Chip Type, High Voltage.
Long Life.
series



For SMD



Long Life

Upgrade

- Chip Type, high voltage and long life.
- Load life of 10000 hours at +105°C
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2011/65/EU).

LV

Long Life LR



Specifications

Item	Performance Characteristics	
Category Temperature Range	-40 to +105°C	
Rated Voltage Range	160 to 500V	
Rated Capacitance Range	1.8 to 33μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Leakage Current	Rated voltage (V)	160 to 450
	-	0.04CV+100(μA)max.(1 minute's)
Tangent of loss angle (tan δ)	Rated voltage (V)	500
	-	0.04CV+200(μA)max.(1 minute's)
Stability at Low Temperature	Measurement frequency : 120Hz at 20°C	
	Rated voltage (V)	160 200 250 400 450 500
Endurance	tan δ (MAX.)	0.20 0.20 0.25 0.25 0.30 0.30
	Measurement frequency: 120Hz	
Shelf Life	Rated voltage (V)	160 200 250 400 450 500
	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C 6 6 10 10 15 15
Resistance to soldering heat	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 10000 hours at 105°C.	
	Capacitance change	Within ±30% of the initial capacitance value
Marking	tan δ	300% or less than the initial specified value
	Leakage current	Less than or equal to the initial specified value
Resistance to soldering heat	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.	
	Capacitance change	Within ±10% of the initial capacitance value
Marking	tan δ	Less than or equal to the initial specified value
	Leakage current	Less than or equal to the initial specified value
Black print on the case top.		

Chip Type

(φ8 × 10L, φ10)

Voltage(2G : 400V)

Series

Lot No.

Trade mark

Capacitance

(mm)

Pressure relief vent

Plastic platform

0.3MAX.

C±0.2

0.5MAX.

B±0.2

E

A±0.2

H

Positive

Negative

Series

Code

160

200

250

400

450

500

Code

2C

2D

2E

2G

2W

2H

Type numbering system (Example : 400V 6.8μF)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

U L V 2 G 6 R 8 M N L 1 G S

Taping code

Configuration

Capacitance tolerance (±20%)

Rated capacitance (6.8μF)

Rated voltage (400V)

Series name

Type

φD×L	8 × 10	10 × 10	10 × 13.5
A	2.9	3.2	3.2
B	8.3	10.3	10.3
C	8.3	10.3	10.3
E	3.1	4.5	4.5
L	10	10	13.5
H	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1

Voltage

V	160	200	250	400	450	500
Code	2C	2D	2E	2G	2W	2H

Dimensions

Cap.(μF)	V	160	200	250	400	450	500
Code	2C	2D	2E	2G	2W	2H	
1.8	1R8						8 × 10 25
3.3	3R3						10 × 10 40
3.9	3R9				8 × 10 35		
4.7	4R7						10 × 13.5 45
5.6	5R6						
6.8	6R8				10 × 10 50	10 × 10 40	
7.5	7R5					10 × 13.5 45	
8.2	8R2			8 × 10 35			
10	100				10 × 13.5 55		
12	120		8 × 10 50				
15	150	8 × 10 50		10 × 10 50			
18	180		10 × 10 65	10 × 13.5 55			
22	220	10 × 10 65					
27	270		10 × 13.5 70				
33	330	10 × 13.5 70					Case size φD × L (mm) Rated ripple

Rated ripple current (mA_{rms}) at 105°C 120Hz

Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.80	1.00	1.25	1.40	1.60

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please refer to page 3 for the minimum order quantity.

CAT.8100D