

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

Voltage

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

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	8 × 10	25		
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 φ D × 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