

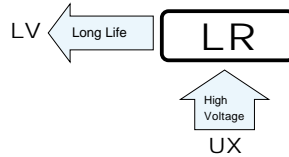
ALUMINUM ELECTROLYTIC CAPACITORS



LR series Chip Type, High Voltage.



- Chip Type, high Voltage.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2011/65/EU).



Specifications

| Item | Performance Characteristics | | | | | | | |
|-------------------------------|---|---|-----|-----|-----|-----|-----|-----|
| Category Temperature Range | -40 to +105°C | | | | | | | |
| Rated Voltage Range | 160 to 500V | | | | | | | |
| Rated Capacitance Range | 2.7 to 39μF | | | | | | | |
| 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 at 20°C | | | | | | | |
| | Rated voltage (V) | 160 | 200 | 250 | 400 | 450 | 500 | |
| Stability at Low Temperature | Measurement frequency: 120Hz | | | | | | | |
| | 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 |
| Endurance | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 3000 hours at 105°C. | | | | | | | |
| | Capacitance change | Within ±20% of the initial capacitance 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. | | | | | | | |
| | tan δ | 200% or less than the initial specified value | | | | | | |
| Resistance to soldering heat | The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the characteristic requirements listed at right when they are removed from the plate. | | | | | | | |
| | Leakage current | Less than or equal to the initial specified value | | | | | | |
| Marking | Black print on the case top. | | | | | | | |

Chip Type

(φ8 × 10L, φ10)

Voltage(2G : 400V)

Lot No.

Trade mark

Series

Capacitance

Pressure relief vent

Plastic platform

0.3MAX.

C±0.2

0.5MAX.

B±0.2

A±0.2

H

L±1.0

φD±0.5

⊕Positive

⊖Negative

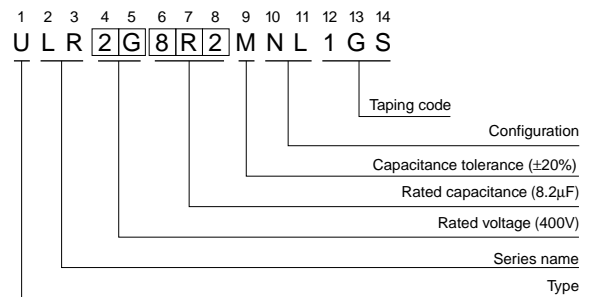
(mm)

| 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 |

Type numbering system (Example : 400V 8.2μF)



Dimensions

| Cap.(μF) | Code | 160 | | 200 | | 250 | | 400 | | 450 | | 500 | |
|----------|------|---------|----|---------|----|---------|----|-------|----|-------|----|---------|----|
| | | 2C | 2D | 2E | 2G | 2W | 2H | | | | | | |
| 2.7 | 2R7 | | | | | | | | | | | | |
| 3.9 | 3R9 | | | | | | | | | | | | |
| 4.7 | 4R7 | | | | | | | | | | | | |
| 5.6 | 5R6 | | | | | | | | | | | | |
| 6.8 | 6R8 | | | | | | | | | | | | |
| 8.2 | 8R2 | | | | | | | | | | | | |
| 10 | 100 | | | | | | | | | | | | |
| 12 | 120 | | | | | | | | | | | | |
| 15 | 150 | 8×10 | 50 | 8×10 | 50 | 8×10 | 35 | 10×10 | 50 | 10×10 | 40 | 10×13.5 | 40 |
| 22 | 220 | | | | | | | | | | | | |
| 27 | 270 | 10×10 | 65 | 10×10 | 65 | 10×13.5 | 55 | | | | | | |
| 33 | 330 | | | | | | | | | | | | |
| 39 | 390 | 10×13.5 | 70 | 10×13.5 | 70 | | | | | | | | |

Rated ripple current (mArms) at 105°C 120Hz

Frequency coefficient of rated ripple current

| Frequency | 50 Hz | 120 Hz | 300 Hz | 1 kHz | 10kHz 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.8100C