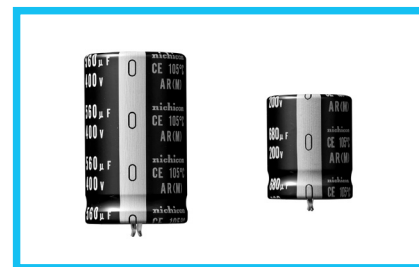


## AR series Snap-in Terminal Type, 105°C Permissible Overvoltage



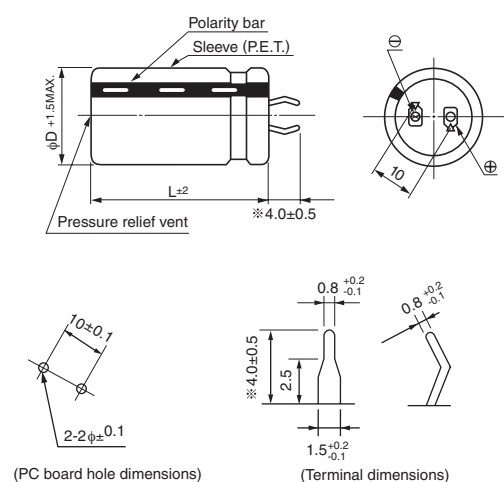
- Withstanding 2000 hours application of rated ripple current at 105°C.
- Reduction of short incidence when overvoltage (rated voltage x 1.5) is applied to a capacitor.
- Compliant to the RoHS directive (2011/65/EU).



### Specifications

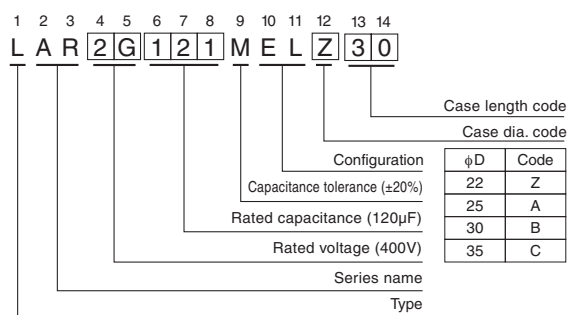
| Item                          | Performance Characteristics   |   |           |
|-------------------------------|---|---|-----------|
| Category Temperature Range    | -40 to +105°C (200·250V), -25 to +105°C (400·450V)  |   |           |
| Rated Voltage Range           | 200 to 450V   |   |           |
| Rated Capacitance Range       | 82 to 2200μF  |   |           |
| Capacitance Tolerance         | ±20% at 120Hz, 20°C   |   |           |
| Leakage Current               | $I \leq 3\sqrt{C}$ (μA) (After 5 minutes' application of rated voltage [C: Rated Capacitance(μF), V: Voltage (V)])  |   |           |
| Tangent of loss angle (tan δ) | Rated voltage (V)   | 200 to 400  | 450       |
|                               | tan δ (MAX.)  | 0.15  | 0.20      |
| Stability at Low Temperature  | Measurement frequency : 120Hz   |   |           |
|                               | Rated voltage(V)  |   | 200 · 250 |
|                               | Impedance ratio   |   | 3         |
| Endurance                     | Z - 25°C / Z+20°C   |   | 8         |
|                               | ZT/Z20(MAX.)  |   | 12        |
| Shelf Life                    | Z - 40°C / Z+20°C   |   | —         |
|                               | 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 2000 hours at 105°C, the peak voltage shall not exceed the rated voltage. |   |           |
| Safety Performance            | Capacitance change  | Within ±20% of the initial capacitance value      |           |
|                               | tan δ   | 200% or less than the initial specified value     |           |
| Marking                       | Leakage current   | Less than or equal to the initial specified value |           |
|                               | Capacitance change  | Within ±15% of the initial capacitance value      |           |
|                               | tan δ   | 150% or less than the initial specified value     |           |
|                               | Leakage current   | Less than or equal to the initial specified value |           |
|                               | When overvoltage (rated voltage x 1.5, limited current = 1A) is applied to a capacitor, the pressure relief vent will operate normally more than 60% of the time without short and flame.                                   |   |           |
|                               | Printed with white color letter on black sleeve.  |   |           |

### Drawing



※ The other terminal is also available upon request.  
Please refer page 326 for schematic of dimensions.

### Type numbering system (Example : 400V 120μF)



### Frequency coefficient of rated ripple current

| Frequency(Hz) | 50       | 60   | 120  | 300  | 1k   | 10k  | 50k or more |
|---------------|----------|------|------|------|------|------|-------------|
| coeff.        | 200·250V | 0.81 | 0.85 | 1.00 | 1.17 | 1.32 | 1.45        |
|               | 400·450V | 0.77 | 0.82 | 1.00 | 1.16 | 1.30 | 1.43        |

Minimum order quantity : 50pcs.

●Dimension table in next page.

### ■ Dimensions

| 200V (2D) |                 |                   |                      |                |
|-----------|-----------------|-------------------|----------------------|----------------|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code           |
| 390       | 22 × 25         | 1310              | 0.83                 | LAR2D391MELZ25 |
| 470       | 22 × 30         | 1480              | 0.91                 | LAR2D471MELZ30 |
|           | 25 × 25         | 1480              | 0.91                 | LAR2D471MELA25 |
| 560       | 22 × 35         | 1600              | 1.00                 | LAR2D561MELZ35 |
| 680       | 22 × 40         | 1750              | 1.10                 | LAR2D681MELZ40 |
|           | 25 × 30         | 1750              | 1.10                 | LAR2D681MELA30 |
|           | 30 × 25         | 1750              | 1.10                 | LAR2D681MELB25 |
| 820       | 22 × 45         | 2040              | 1.21                 | LAR2D821MELZ45 |
|           | 25 × 35         | 2040              | 1.21                 | LAR2D821MELA35 |
| 1000      | 22 × 50         | 2300              | 1.34                 | LAR2D102MELZ50 |
|           | 25 × 45         | 2300              | 1.34                 | LAR2D102MELA45 |
|           | 30 × 30         | 2300              | 1.34                 | LAR2D102MELB30 |
|           | 35 × 25         | 2300              | 1.34                 | LAR2D102MELC25 |
| 1200      | 25 × 50         | 2650              | 1.46                 | LAR2D122MELA50 |
|           | 30 × 35         | 2650              | 1.46                 | LAR2D122MELB35 |
|           | 35 × 30         | 2650              | 1.46                 | LAR2D122MELC30 |
| 1500      | 30 × 40         | 2800              | 1.64                 | LAR2D152MELB40 |
|           | 35 × 35         | 2800              | 1.64                 | LAR2D152MELC35 |
| 1800      | 30 × 50         | 3080              | 1.80                 | LAR2D182MELB50 |
|           | 35 × 40         | 3080              | 1.80                 | LAR2D182MELC40 |
| 2200      | 35 × 45         | 3480              | 1.98                 | LAR2D222MELC45 |

| 250V (2E) |                 |                   |                      |                |
|-----------|-----------------|-------------------|----------------------|----------------|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code           |
| 270       | 22 × 25         | 1100              | 0.77                 | LAR2E271MELZ25 |
| 330       | 22 × 30         | 1200              | 0.86                 | LAR2E331MELZ30 |
|           | 25 × 25         | 1200              | 0.86                 | LAR2E331MELA25 |
| 390       | 22 × 35         | 1300              | 0.93                 | LAR2E391MELZ35 |
|           | 25 × 30         | 1300              | 0.93                 | LAR2E391MELA30 |
| 470       | 22 × 40         | 1400              | 1.02                 | LAR2E471MELZ40 |
|           | 25 × 35         | 1400              | 1.02                 | LAR2E471MELA35 |
|           | 30 × 25         | 1400              | 1.02                 | LAR2E471MELB25 |
| 560       | 22 × 45         | 1500              | 1.12                 | LAR2E561MELZ45 |
|           | 25 × 35         | 1500              | 1.12                 | LAR2E561MELA35 |
|           | 30 × 30         | 1500              | 1.12                 | LAR2E561MELB30 |
| 680       | 22 × 50         | 1700              | 1.23                 | LAR2E681MELZ50 |
|           | 25 × 40         | 1700              | 1.23                 | LAR2E681MELA40 |
|           | 30 × 30         | 1700              | 1.23                 | LAR2E681MELB30 |
| 820       | 25 × 45         | 2000              | 1.35                 | LAR2E821MELA45 |
|           | 30 × 35         | 2000              | 1.35                 | LAR2E821MELB35 |
|           | 35 × 30         | 2000              | 1.35                 | LAR2E821MELC30 |
| 1000      | 30 × 40         | 2200              | 1.50                 | LAR2E102MELB40 |
|           | 35 × 35         | 2200              | 1.50                 | LAR2E102MELC35 |
| 1200      | 30 × 45         | 2300              | 1.64                 | LAR2E122MELB45 |
|           | 35 × 40         | 2300              | 1.64                 | LAR2E122MELC40 |
| 1500      | 35 × 45         | 2500              | 1.83                 | LAR2E152MELC45 |
| 1800      | 35 × 50         | 2700              | 2.01                 | LAR2E182MELC50 |

| 400V (2G) |                 |                   |                      |                |
|-----------|-----------------|-------------------|----------------------|----------------|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code           |
| 100       | 22 × 25         | 680               | 0.60                 | LAR2G101MELZ25 |
| 120       | 22 × 30         | 730               | 0.65                 | LAR2G121MELZ30 |
| 180       | 22 × 35         | 950               | 0.80                 | LAR2G181MELZ35 |
|           | 25 × 30         | 950               | 0.80                 | LAR2G181MELA30 |
| 220       | 30 × 25         | 950               | 0.80                 | LAR2G181MELB25 |
|           | 22 × 45         | 1100              | 0.88                 | LAR2G221MELZ45 |
| 270       | 25 × 35         | 1100              | 0.88                 | LAR2G221MELA35 |
|           | 30 × 25         | 1100              | 0.88                 | LAR2G221MELB25 |
|           | 22 × 50         | 1220              | 0.98                 | LAR2G271MELZ50 |
| 330       | 25 × 40         | 1220              | 0.98                 | LAR2G271MELA40 |
|           | 30 × 30         | 1220              | 0.98                 | LAR2G271MELB30 |
|           | 35 × 25         | 1220              | 0.98                 | LAR2G271MELC25 |
| 390       | 25 × 45         | 1440              | 1.08                 | LAR2G331MELA45 |
|           | 30 × 35         | 1440              | 1.08                 | LAR2G331MELB35 |
| 470       | 25 × 50         | 1550              | 1.18                 | LAR2G391MELA50 |
|           | 30 × 40         | 1550              | 1.18                 | LAR2G391MELB40 |
|           | 35 × 30         | 1550              | 1.18                 | LAR2G391MELC30 |
| 560       | 30 × 45         | 1680              | 1.30                 | LAR2G471MELB45 |
|           | 35 × 35         | 1680              | 1.30                 | LAR2G471MELC35 |
| 680       | 30 × 50         | 1900              | 1.41                 | LAR2G561MELB50 |
|           | 35 × 40         | 1900              | 1.41                 | LAR2G561MELC40 |

| 450V (2W) |                 |                   |                      |                |
|-----------|-----------------|-------------------|----------------------|----------------|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code           |
| 82        | 22 × 25         | 340               | 0.57                 | LAR2W820MELZ25 |
| 100       | 22 × 30         | 690               | 0.63                 | LAR2W101MELZ30 |
|           | 25 × 25         | 690               | 0.63                 | LAR2W101MELA25 |
| 120       | 22 × 35         | 720               | 0.69                 | LAR2W121MELZ35 |
|           | 25 × 30         | 720               | 0.69                 | LAR2W121MELA30 |
| 150       | 22 × 40         | 790               | 0.77                 | LAR2W151MELZ40 |
|           | 25 × 30         | 790               | 0.77                 | LAR2W151MELA30 |
|           | 30 × 25         | 790               | 0.77                 | LAR2W151MELB25 |
| 180       | 22 × 45         | 870               | 0.85                 | LAR2W181MELZ45 |
|           | 25 × 35         | 870               | 0.85                 | LAR2W181MELA35 |
|           | 30 × 30         | 870               | 0.85                 | LAR2W181MELB30 |
| 220       | 25 × 40         | 1050              | 0.94                 | LAR2W221MELA40 |
|           | 30 × 30         | 1050              | 0.94                 | LAR2W221MELB30 |
|           | 35 × 25         | 1050              | 0.94                 | LAR2W221MELC25 |
| 270       | 25 × 50         | 1230              | 1.04                 | LAR2W271MELA50 |
|           | 30 × 35         | 1230              | 1.04                 | LAR2W271MELB35 |
|           | 35 × 30         | 1230              | 1.04                 | LAR2W271MELC30 |
| 330       | 30 × 40         | 1380              | 1.15                 | LAR2W331MELB40 |
|           | 35 × 35         | 1380              | 1.15                 | LAR2W331MELC35 |
| 390       | 30 × 50         | 1610              | 1.25                 | LAR2W391MELB50 |
|           | 35 × 40         | 1610              | 1.25                 | LAR2W391MELC40 |
| 470       | 35 × 45         | 1780              | 1.37                 | LAR2W471MELC45 |
| 560       | 35 × 50         | 1990              | 1.50                 | LAR2W561MELC50 |

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