



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

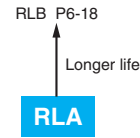
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# RLA Series

- Endurance with ripple current : 3,000 hours at 85°C
- High ripple current capability in a commercial frequency range
- High ripple current for inverter control like air conditioner
- Rated voltage range : 180 to 250Vdc, Capacitance range : 600 to 2,200μF
- Non solvent resistant type
- RoHS2 Compliant

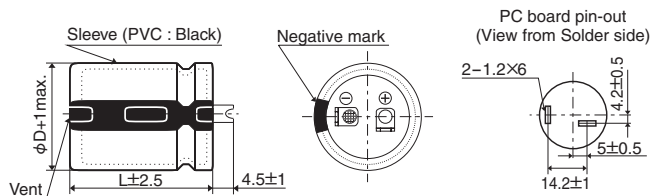


## SPECIFICATIONS

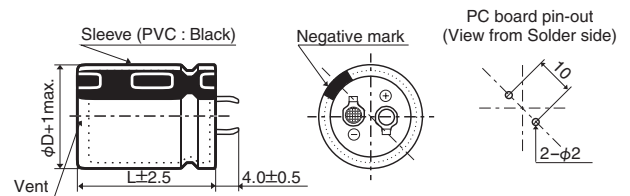
| Items  | Characteristics  |                                       |
|--|--|---------------------------------------|
| Category   | -25 to +85°C   |                                       |
| Temperature Range                                      | -25 to +85°C   |                                       |
| Rated Voltage Range                                    | 180 to 250V  |                                       |
| Capacitance Tolerance                                  | ± 10% (K) (at 20°C, 120Hz)   |                                       |
| Leakage Current  | $I \leq 3/CV$<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)   |                                       |
| Dissipation Factor (tan δ)                             | Rated voltage (V <sub>ac</sub> )   | 180 to 250V                           |
|  | tan δ (Max.)   | 0.15 (at 20°C, 120Hz)                 |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V <sub>ac</sub> )   | 180 to 250V                           |
|  | Z(-25°C)/Z(+20°C)  | 4 (at 120Hz)                          |
| Endurance  | The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 3,000 hours at 85°C.   |                                       |
|  | Capacitance change   | ≤ ±20% of the initial value           |
|  | D. F. (tan δ)  | ≤ 200% of the initial specified value |
|  | Leakage current  | ≤ The initial specified value         |
| Shelf Life   | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. |                                       |
|  | Capacitance change   | ≤ ± 15% of the initial value          |
|  | D. F. (tan δ)  | ≤ 150% of the initial specified value |
|  | Leakage current  | ≤ The initial specified value         |

## DIMENSIONS [mm]

Terminal Code : LI (φ30, φ35) : Standard

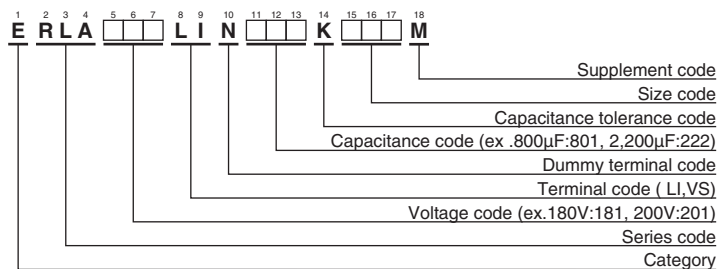


Terminal Code : VS (φ30, φ35)



The standard design has no plastic disc.

## PART NUMBERING SYSTEM



Please refer to "Product code guide (snap-in type)"

◆STANDARD RATINGS

| WV (V <sub>dc</sub> ) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/85°C, 120Hz) | Part No.           | WV (V <sub>dc</sub> ) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/85°C, 120Hz) | Part No.           |
|-----------------------|----------|--------------------|-------|---|--------------------|-----------------------|----------|--------------------|-------|---|--------------------|
| 180                   | 900      | 30 × 35            | 0.15  | 4.66                                    | ERLA181LIN901KR35M | 210                   | 1,400    | 30 × 55            | 0.15  | 6.31                                    | ERLA211LIN142KR55M |
|                       | 1,100    | 30 × 40            | 0.15  | 5.17                                    | ERLA181LIN112KR40M |                       | 1,500    | 35 × 45            | 0.15  | 6.21                                    | ERLA211LIN152KA45M |
|                       | 1,300    | 30 × 45            | 0.15  | 5.64                                    | ERLA181LIN132KR45M |                       | 1,700    | 35 × 50            | 0.15  | 6.82                                    | ERLA211LIN172KA50M |
|                       | 1,500    | 30 × 50            | 0.15  | 6.07                                    | ERLA181LIN152KR50M |                       | 2,000    | 35 × 55            | 0.15  | 7.62                                    | ERLA211LIN202KA55M |
|                       | 1,500    | 35 × 40            | 0.15  | 5.75                                    | ERLA181LIN152KA40M | 220                   | 700      | 30 × 35            | 0.15  | 4.27                                    | ERLA221LIN701KR35M |
|                       | 1,700    | 30 × 55            | 0.15  | 6.63                                    | ERLA181LIN172KR55M |                       | 900      | 30 × 40            | 0.15  | 4.85                                    | ERLA221LIN901KR40M |
|                       | 1,800    | 35 × 45            | 0.15  | 6.37                                    | ERLA181LIN182KA45M |                       | 1,000    | 30 × 45            | 0.15  | 5.19                                    | ERLA221LIN102KR45M |
|                       | 2,000    | 35 × 50            | 0.15  | 6.84                                    | ERLA181LIN202KA50M |                       | 1,000    | 35 × 35            | 0.15  | 4.87                                    | ERLA221LIN102KA35M |
| 200                   | 900      | 30 × 35            | 0.15  | 4.66                                    | ERLA201LIN901KR35M |                       | 1,200    | 30 × 50            | 0.15  | 5.68                                    | ERLA221LIN122KR50M |
|                       | 1,000    | 30 × 40            | 0.15  | 5.01                                    | ERLA201LIN102KR40M |                       | 1,200    | 35 × 40            | 0.15  | 5.44                                    | ERLA221LIN122KA40M |
|                       | 1,200    | 30 × 45            | 0.15  | 5.51                                    | ERLA201LIN122KR45M |                       | 1,300    | 30 × 55            | 0.15  | 6.09                                    | ERLA221LIN132KR55M |
|                       | 1,200    | 35 × 35            | 0.15  | 5.14                                    | ERLA201LIN122KA35M |                       | 1,400    | 35 × 45            | 0.15  | 5.96                                    | ERLA221LIN142KA45M |
|                       | 1,400    | 30 × 50            | 0.15  | 5.95                                    | ERLA201LIN142KR50M | 1,600                 | 35 × 50  | 0.15               | 6.51  | ERLA221LIN162KA50M                      |                    |
|                       | 1,400    | 35 × 40            | 0.15  | 5.66                                    | ERLA201LIN142KA40M | 1,800                 | 35 × 55  | 0.15               | 7.10  | ERLA221LIN182KA55M                      |                    |
|                       | 1,500    | 30 × 55            | 0.15  | 6.36                                    | ERLA201LIN152KR55M | 250                   | 600      | 30 × 35            | 0.15  | 4.03                                    | ERLA251LIN601KR35M |
|                       | 1,600    | 35 × 45            | 0.15  | 6.14                                    | ERLA201LIN162KA45M |                       | 800      | 30 × 40            | 0.15  | 4.66                                    | ERLA251LIN801KR40M |
| 1,900                 | 35 × 50  | 0.15               | 6.82  | ERLA201LIN192KA50M                      | 900                |                       | 30 × 45  | 0.15               | 5.01  | ERLA251LIN901KR45M                      |                    |
| 2,200                 | 35 × 55  | 0.15               | 7.60  | ERLA201LIN222KA55M                      | 900                |                       | 35 × 35  | 0.15               | 4.73  | ERLA251LIN901KA35M                      |                    |
| 210                   | 800      | 30 × 35            | 0.15  | 4.48                                    | ERLA211LIN801KR35M |                       | 1,000    | 30 × 50            | 0.15  | 5.32                                    | ERLA251LIN102KR50M |
|                       | 900      | 30 × 40            | 0.15  | 4.86                                    | ERLA211LIN901KR40M |                       | 1,100    | 35 × 40            | 0.15  | 5.33                                    | ERLA251LIN112KA40M |
|                       | 1,100    | 30 × 45            | 0.15  | 5.39                                    | ERLA211LIN112KR45M |                       | 1,200    | 30 × 55            | 0.15  | 5.96                                    | ERLA251LIN122KR55M |
|                       | 1,100    | 35 × 35            | 0.15  | 5.06                                    | ERLA211LIN112KA35M |                       | 1,200    | 35 × 45            | 0.15  | 5.68                                    | ERLA251LIN122KA45M |
|                       | 1,200    | 30 × 50            | 0.15  | 5.71                                    | ERLA211LIN122KR50M | 1,400                 | 35 × 50  | 0.15               | 6.25  | ERLA251LIN142KA50M                      |                    |
|                       | 1,300    | 35 × 40            | 0.15  | 5.65                                    | ERLA211LIN132KA40M | 1,600                 | 35 × 55  | 0.15               | 6.87  | ERLA251LIN162KA55M                      |                    |

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

| Frequency(Hz)             | 50   | 120  | 300  | 1k   | 10k  | 50k  |
|---------------------------|------|------|------|------|------|------|
| 180 to 250V <sub>dc</sub> | 0.70 | 1.00 | 1.17 | 1.32 | 1.45 | 1.50 |

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.