

# RWE Series

- Rated voltage range : 350 to 550V<sub>dc</sub>
- Endurance with ripple current : 85°C 2,000 hours
- RoHS Compliant

RWF P294  
↑  
Longer life  
**RWE**

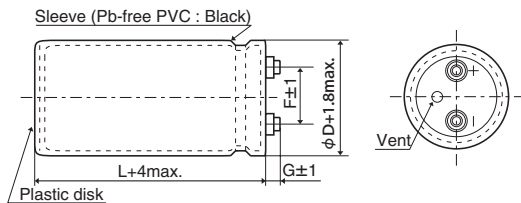


## SPECIFICATIONS

| Items                           | Characteristics                                                                                                                                                                                                                                                                    |                                      |             |            |            |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------|------------|------------|
| Category                        | -25 to +85℃                                                                                                                                                                                                                                                                        |                                      |             |            |            |
| Temperature Range               |                                                                                                                                                                                                                                                                                    |                                      |             |            |            |
| Rated Voltage Range             | 350 to 550V <sub>dc</sub>                                                                                                                                                                                                                                                          |                                      |             |            |            |
| Capacitance Tolerance           | ±20% (M) (at 20℃, 120Hz)                                                                                                                                                                                                                                                           |                                      |             |            |            |
| Leakage Current                 | I=0.02CV or 5mA, whichever is smaller.<br>Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20℃ after 5 minutes)                                                                                                                       |                                      |             |            |            |
| Dissipation Factor (tan δ)      | 0.25 max. (at 20℃, 120Hz)                                                                                                                                                                                                                                                          |                                      |             |            |            |
| Low Temperature Characteristics | Capacitance change                                                                                                                                                                                                                                                                 | Rated Voltage (V <sub>dc</sub> )     | 350 to 450V | 500 & 550V | (at 120Hz) |
|                                 |                                                                                                                                                                                                                                                                                    | C(-25℃)/C(+20℃)                      | ≥0.7        | ≥0.6       |            |
| Insulation Resistance           | When measured between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V <sub>dc</sub> , the insulation resistance shall not be less than 100MΩ.                  |                                      |             |            |            |
| Insulation Withstanding Voltage | When a voltage of 2,000V <sub>ac</sub> is applied for 1 minute between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.                                                  |                                      |             |            |            |
| Endurance                       | The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 2,000 hours at 85℃.                                       |                                      |             |            |            |
|                                 | Capacitance change                                                                                                                                                                                                                                                                 | ≤ ±20% of the initial value          |             |            |            |
|                                 | D.F. (tan δ)                                                                                                                                                                                                                                                                       | ≤300% 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℃ after exposing them for 500 hours at 85℃ 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                                                                                                                                                                                                                                                                 | ≤ ±20% of the initial value          |             |            |            |
|                                 | D.F. (tan δ)                                                                                                                                                                                                                                                                       | ≤300% of the initial specified value |             |            |            |
|                                 | Leakage current                                                                                                                                                                                                                                                                    | ≤The initial specified value         |             |            |            |

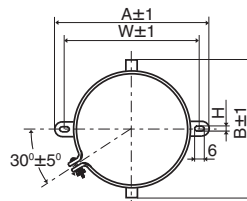
## DIMENSIONS (Screw-Mount) [mm]

● Terminal Code : LG



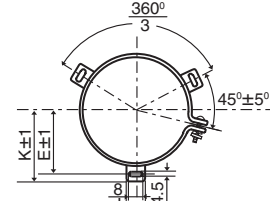
φ35 to φ63.5 : G=6  
φ76.2 & φ89 : G=5

● Mounting Clamp Code : B



| φD   | A     | B    | W    | H   | F    |
|------|-------|------|------|-----|------|
| 35   | 58.0  | 44.0 | 48.0 | 3.5 | 12.7 |
| 50   | 78.0  | 64.0 | 68.0 | 4.5 | 22.4 |
| 63.5 | 90.0  | 76.0 | 80.0 | 4.5 | 28.0 |
| 76.2 | 104.5 | 90.0 | 93.5 | 4.5 | 31.5 |

● Mounting Clamp Code : C



| φD   | E    | K    | F    | J    |
|------|------|------|------|------|
| 50   | 32.5 | 37.0 | 22.4 | 14.0 |
| 63.5 | 38.1 | 43.5 | 28.0 | 14.0 |
| 76.2 | 44.5 | 50.0 | 31.5 | 14.0 |
| 89   | 50.8 | 56.5 | 31.5 | 16.0 |

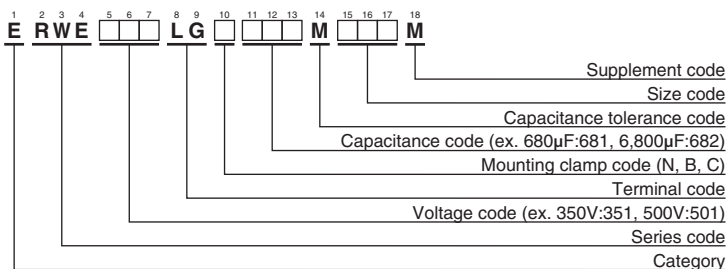
<Screw specifications>

Plus hexagon-headed screw : M5×0.8×10

Maximum screw tightening torque : 3.23Nm

\* The screw and the mounting clamp are separately supplied and not attached to the product.

## PART NUMBERING SYSTEM



Please refer to "Product code guide (screw-mount terminal type)"

◆STANDARD RATINGS

| WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | tan δ | Rated ripple<br>current<br>(Arms/<br>85°C, 120Hz) | Part No.           | WV<br>(V <sub>dc</sub> ) | Cap<br>(μF) | Case size<br>φD×L(mm) | tan δ | Rated ripple<br>current<br>(Arms/<br>85°C, 120Hz) | Part No.           |
|--------------------------|-------------|-----------------------|-------|---------------------------------------------------|--------------------|--------------------------|-------------|-----------------------|-------|---------------------------------------------------|--------------------|
| 350                      | 390         | 35 × 50               | 0.25  | 1.90                                              | ERWE351LGB391MA50M | 450                      | 2,700       | 63.5 × 115            | 0.25  | 8.60                                              | ERWE451LGC272MDB5M |
|                          | 680         | 35 × 80               | 0.25  | 2.90                                              | ERWE351LGB681MA80M |                          | 3,300       | 63.5 × 130            | 0.25  | 10.0                                              | ERWE451LGC332MDD0M |
|                          | 1,000       | 35 × 100              | 0.25  | 3.80                                              | ERWE351LGB102MAA0M |                          | 3,300       | 76.2 × 96             | 0.25  | 9.80                                              | ERWE451LGC332ME96M |
|                          | 1,200       | 35 × 120              | 0.25  | 4.20                                              | ERWE351LGB122MAC0M |                          | 3,900       | 76.2 × 115            | 0.25  | 11.5                                              | ERWE451LGC392MEB5M |
|                          | 1,500       | 50 × 75               | 0.25  | 4.70                                              | ERWE351LGC152MC75M |                          | 4,700       | 76.2 × 130            | 0.25  | 13.3                                              | ERWE451LGC472MED0M |
|                          | 2,200       | 50 × 96               | 0.25  | 6.30                                              | ERWE351LGC222MC96M |                          | 5,600       | 76.2 × 155            | 0.25  | 15.7                                              | ERWE451LGC562MEF5M |
|                          | 3,300       | 50 × 130              | 0.25  | 8.80                                              | ERWE351LGC332MCD0M | 500                      | 8,200       | 89 × 155              | 0.25  | 18.6                                              | ERWE451LGC822MFF5M |
|                          | 3,300       | 63.5 × 96             | 0.25  | 8.80                                              | ERWE351LGC332MD96M |                          | 120         | 35 × 50               | 0.25  | 0.70                                              | ERWE501LGB121MA50M |
|                          | 3,900       | 63.5 × 115            | 0.25  | 10.3                                              | ERWE351LGC392MDB5M |                          | 270         | 35 × 80               | 0.25  | 1.20                                              | ERWE501LGB271MA80M |
|                          | 4,700       | 63.5 × 130            | 0.25  | 12.0                                              | ERWE351LGC472MDD0M |                          | 330         | 35 × 100              | 0.25  | 1.40                                              | ERWE501LGB331MAA0M |
|                          | 4,700       | 76.2 × 96             | 0.25  | 11.7                                              | ERWE351LGC472ME96M |                          | 390         | 35 × 120              | 0.25  | 1.70                                              | ERWE501LGB391MAC0M |
|                          | 5,600       | 76.2 × 115            | 0.25  | 12.6                                              | ERWE351LGC562MEB5M |                          | 470         | 50 × 75               | 0.25  | 1.80                                              | ERWE501LGC471MC75M |
| 400                      | 6,800       | 76.2 × 130            | 0.25  | 15.9                                              | ERWE351LGC682MED0M |                          | 680         | 50 × 96               | 0.25  | 2.50                                              | ERWE501LGC681MC96M |
|                          | 8,200       | 76.2 × 155            | 0.25  | 19.0                                              | ERWE351LGC822MEF5M |                          | 820         | 50 × 115              | 0.25  | 2.90                                              | ERWE501LGC821MCB5M |
|                          | 12,000      | 89 × 155              | 0.25  | 22.5                                              | ERWE351LGC123MFF5M |                          | 1,000       | 50 × 130              | 0.25  | 3.40                                              | ERWE501LGC102MCD0M |
|                          | 330         | 35 × 50               | 0.25  | 1.70                                              | ERWE401LGB331MA50M |                          | 1,000       | 63.5 × 96             | 0.25  | 3.40                                              | ERWE501LGC102MD96M |
|                          | 560         | 35 × 80               | 0.25  | 2.70                                              | ERWE401LGB561MA80M |                          | 1,500       | 63.5 × 115            | 0.25  | 4.50                                              | ERWE501LGC152MDB5M |
|                          | 820         | 35 × 100              | 0.25  | 3.40                                              | ERWE401LGB821MAA0M |                          | 1,500       | 76.2 × 96             | 0.25  | 4.60                                              | ERWE501LGC152ME96M |
|                          | 1,000       | 35 × 120              | 0.25  | 3.90                                              | ERWE401LGB102MAC0M |                          | 1,800       | 63.5 × 130            | 0.25  | 5.20                                              | ERWE501LGC182MDD0M |
|                          | 1,200       | 50 × 75               | 0.25  | 4.20                                              | ERWE401LGC122MC75M |                          | 2,200       | 76.2 × 115            | 0.25  | 6.10                                              | ERWE501LGC222MEB5M |
|                          | 1,800       | 50 × 96               | 0.25  | 5.70                                              | ERWE401LGC182MC96M |                          | 2,700       | 76.2 × 155            | 0.25  | 7.70                                              | ERWE501LGC272MEF5M |
|                          | 2,200       | 50 × 130              | 0.25  | 7.20                                              | ERWE401LGC222MCD0M |                          | 3,900       | 89 × 155              | 0.25  | 10.1                                              | ERWE501LGC392MFF5M |
|                          | 2,700       | 63.5 × 96             | 0.25  | 7.90                                              | ERWE401LGC272MD96M | 550                      | 100         | 35 × 50               | 0.25  | 0.60                                              | ERWE551LGB101MA50M |
|                          | 3,300       | 63.5 × 115            | 0.25  | 9.50                                              | ERWE401LGC332MDB5M |                          | 180         | 35 × 80               | 0.25  | 1.00                                              | ERWE551LGB181MA80M |
|                          | 3,900       | 63.5 × 130            | 0.25  | 10.9                                              | ERWE401LGC392MDD0M |                          | 270         | 35 × 100              | 0.25  | 1.30                                              | ERWE551LGB271MAA0M |
| 450                      | 3,900       | 76.2 × 96             | 0.25  | 10.6                                              | ERWE401LGC392ME96M |                          | 330         | 35 × 120              | 0.25  | 1.60                                              | ERWE551LGB331MAC0M |
|                          | 4,700       | 76.2 × 115            | 0.25  | 12.6                                              | ERWE401LGC472MEB5M |                          | 390         | 50 × 75               | 0.25  | 1.70                                              | ERWE551LGC391MC75M |
|                          | 5,600       | 76.2 × 130            | 0.25  | 14.5                                              | ERWE401LGC562MED0M |                          | 560         | 50 × 96               | 0.25  | 2.10                                              | ERWE551LGC561MC96M |
|                          | 6,800       | 76.2 × 155            | 0.25  | 17.3                                              | ERWE401LGC682MEF5M |                          | 560         | 63.5 × 96             | 0.25  | 2.50                                              | ERWE551LGC561MD96M |
|                          | 10,000      | 89 × 155              | 0.25  | 20.5                                              | ERWE401LGC103MFF5M |                          | 680         | 50 × 115              | 0.25  | 2.70                                              | ERWE551LGC681MCB5M |
|                          | 270         | 35 × 50               | 0.25  | 1.60                                              | ERWE451LGB271MA50M |                          | 680         | 63.5 × 115            | 0.25  | 3.00                                              | ERWE551LGC681MDB5M |
|                          | 470         | 35 × 80               | 0.25  | 2.40                                              | ERWE451LGB471MA80M |                          | 820         | 50 × 130              | 0.25  | 3.10                                              | ERWE551LGC821MCD0M |
|                          | 680         | 35 × 100              | 0.25  | 3.10                                              | ERWE451LGB681MAA0M |                          | 820         | 63.5 × 130            | 0.25  | 3.50                                              | ERWE551LGC821MDD0M |
|                          | 820         | 35 × 120              | 0.25  | 3.50                                              | ERWE451LGB821MAC0M |                          | 1,200       | 76.2 × 96             | 0.25  | 4.20                                              | ERWE551LGC122ME96M |
|                          | 1,000       | 50 × 75               | 0.25  | 3.90                                              | ERWE451LGC102MC75M |                          | 1,500       | 76.2 × 115            | 0.25  | 5.00                                              | ERWE551LGC152MEB5M |
|                          | 1,200       | 50 × 96               | 0.25  | 4.70                                              | ERWE451LGC122MC96M |                          | 1,800       | 76.2 × 130            | 0.25  | 5.80                                              | ERWE551LGC182MED0M |
|                          | 1,500       | 50 × 115              | 0.25  | 5.60                                              | ERWE451LGC152MCB5M |                          | 2,200       | 76.2 × 155            | 0.25  | 7.00                                              | ERWE551LGC222MEF5M |
|                          | 1,800       | 50 × 130              | 0.25  | 6.50                                              | ERWE451LGC182MCD0M |                          | 3,300       | 89 × 155              | 0.25  | 9.30                                              | ERWE551LGC332MFF5M |
|                          | 2,200       | 63.5 × 96             | 0.25  | 7.20                                              | ERWE451LGC222MD96M |                          |             |                       |       |                                                   |                    |

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

| Frequency (Hz) | 50  | 120 | 300 | 1k  | 3k  |
|----------------|-----|-----|-----|-----|-----|
| Coefficient    | 0.8 | 1.0 | 1.1 | 1.3 | 1.4 |

Note : The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5 to 10°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced. Also, for the RWE series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For details, please contact a representative of Nippon Chemi-Con.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
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- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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