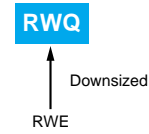


RWQ Series

- Downsized and high ripple current from RWE series
- Endurance with ripple current : 2,000 hours at 85°C
- RoHS Compliant



◆ SPECIFICATIONS

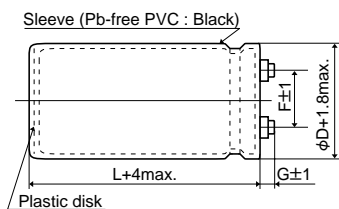
| Items | Characteristics | | |
|---------------------------------|--|--------------------------------------|-------------|
| Category | -25 to +85°C | | |
| Temperature Range | -25 to +85°C | | |
| Rated Voltage Range | 350 to 550V _{dc} | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | |
| Leakage Current | I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V _{dc}) (at 20°C after 5 minutes) | | |
| Dissipation Factor (tanδ) | 0.25 max. (at 20°C, 120Hz) | | |
| Low Temperature Characteristics | Rated voltage (V _{dc}) | 350 to 450V | 500 to 550V |
| | C(-25°C) / C(+20°C) | ≥0.7 | ≥0.6 |
| Insulation Resistance | When measured between the terminals shorted each other and the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V _{dc} , the insulation resistance shall not be less than 100MΩ. (at 120Hz) | | |
| Insulation Withstanding Voltage | When a voltage of 2,000Vac is applied for 1 minute between the terminals shorted each other and 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°C after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 85°C. | | |
| | Capacitance change | ≤±20% of the initial value | |
| | D.F. (tanδ) | ≤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°C after exposing them for 500 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 | ≤±20% of the initial value | |
| | D.F. (tanδ) | ≤300% of the initial specified value | |
| | Leakage current | ≤The initial specified value | |

◆ DIMENSIONS (Screw-Mount) [mm]

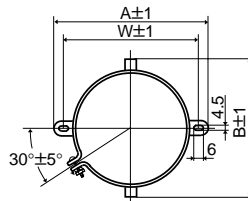
● Terminal Code : LG

● Mounting Clamp Code : B

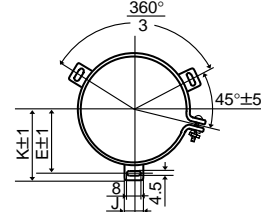
● Mounting Clamp Code : C



φ50 & φ63.5 : G=6
φ76.2 & φ89 : G=5



| φD | A | B | W | F |
|------|-------|------|------|------|
| 50 | 78.0 | 64.0 | 68.0 | 22.4 |
| 63.5 | 90.0 | 76.0 | 80.0 | 28.0 |
| 76.2 | 104.5 | 90.0 | 93.5 | 31.5 |



| 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>

φ50 to φ89

Plus hexagon-headed screw :

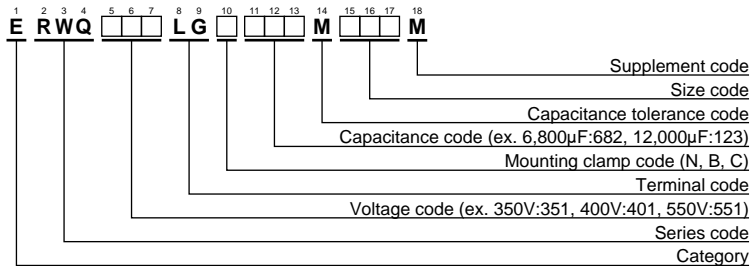
M5×0.8×10

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 (Vdc) | Cap (μF) | Case size φDXL(mm) | tanδ | Rated ripple current (Arms/85°C,120Hz) | Part No. | WV (Vdc) | Cap (μF) | Case size φDXL(mm) | tanδ | Rated ripple current (Arms/85°C,120Hz) | Part No. |
|----------|----------|--------------------|------|--|--------------------|------------|----------|--------------------|--------------------|--|--------------------|
| 350 | 1,500 | 50 × 65 | 0.25 | 5.09 | ERWQ351LGC152MC65M | 500 | 470 | 50 × 60 | 0.25 | 2.17 | ERWQ501LGC471MC60M |
| | 1,800 | 50 × 75 | 0.25 | 5.93 | ERWQ351LGC182MC75M | | 680 | 50 × 65 | 0.25 | 2.70 | ERWQ501LGC681MC65M |
| | 2,200 | 50 × 96 | 0.25 | 7.30 | ERWQ351LGC222MC96M | | 820 | 50 × 75 | 0.25 | 3.15 | ERWQ501LGC821MC75M |
| | 2,700 | 50 × 115 | 0.25 | 8.76 | ERWQ351LGC272MCB5M | | 1,000 | 50 × 85 | 0.25 | 3.67 | ERWQ501LGC102MC85M |
| | 3,300 | 63.5 × 85 | 0.25 | 9.71 | ERWQ351LGC332MD85M | | 1,200 | 50 × 96 | 0.25 | 4.22 | ERWQ501LGC122MC96M |
| | 3,900 | 50 × 130 | 0.25 | 11.1 | ERWQ351LGC392MCD0M | | 1,500 | 50 × 115 | 0.25 | 5.14 | ERWQ501LGC152MCB5M |
| | 3,900 | 63.5 × 96 | 0.25 | 11.1 | ERWQ351LGC392MD96M | | 1,500 | 63.5 × 96 | 0.25 | 5.42 | ERWQ501LGC152MD96M |
| | 4,700 | 63.5 × 115 | 0.25 | 13.2 | ERWQ351LGC472MDB5M | | 1,800 | 50 × 130 | 0.25 | 5.95 | ERWQ501LGC182MCD0M |
| | 5,600 | 63.5 × 130 | 0.25 | 15.2 | ERWQ351LGC562MDD0M | | 1,800 | 63.5 × 96 | 0.25 | 5.94 | ERWQ501LGC182MD96M |
| | 5,600 | 76.2 × 96 | 0.25 | 14.3 | ERWQ351LGC562ME96M | | 2,200 | 63.5 × 115 | 0.25 | 7.10 | ERWQ501LGC222MDB5M |
| | 6,800 | 76.2 × 115 | 0.25 | 17.0 | ERWQ351LGC682MEB5M | | 2,200 | 76.2 × 96 | 0.25 | 7.30 | ERWQ501LGC222ME96M |
| | 8,200 | 76.2 × 130 | 0.25 | 19.6 | ERWQ351LGC822MED0M | | 2,700 | 63.5 × 130 | 0.25 | 8.31 | ERWQ501LGC272MDD0M |
| | 10,000 | 76.2 × 155 | 0.25 | 23.4 | ERWQ351LGC103MEF5M | | 3,300 | 76.2 × 115 | 0.25 | 9.65 | ERWQ501LGC332MEB5M |
| | 12,000 | 89 × 130 | 0.25 | 24.1 | ERWQ351LGC123MFD0M | | 3,900 | 76.2 × 130 | 0.25 | 11.1 | ERWQ501LGC392MED0M |
| 15,000 | 89 × 155 | 0.25 | 29.1 | ERWQ351LGC153MFF5M | 4,700 | 76.2 × 155 | 0.25 | 13.1 | ERWQ501LGC472MEF5M | | |
| 400 | 1,200 | 50 × 65 | 0.25 | 4.55 | ERWQ401LGC122MC65M | 6,800 | 89 × 155 | 0.25 | 15.9 | ERWQ501LGC682MFF5M | |
| | 1,500 | 50 × 75 | 0.25 | 5.41 | ERWQ401LGC152MC75M | 550 | 390 | 50 × 60 | 0.25 | 1.98 | ERWQ551LGC391MC60M |
| | 1,800 | 50 × 85 | 0.25 | 6.26 | ERWQ401LGC182MC85M | | 560 | 50 × 65 | 0.25 | 2.45 | ERWQ551LGC561MC65M |
| | 2,200 | 50 × 96 | 0.25 | 7.30 | ERWQ401LGC222MC96M | | 680 | 50 × 75 | 0.25 | 2.87 | ERWQ551LGC681MC75M |
| | 2,700 | 50 × 115 | 0.25 | 8.76 | ERWQ401LGC272MCB5M | | 820 | 50 × 85 | 0.25 | 3.32 | ERWQ551LGC821MC85M |
| | 3,300 | 63.5 × 96 | 0.25 | 10.2 | ERWQ401LGC332MD96M | | 1,200 | 50 × 115 | 0.25 | 4.60 | ERWQ551LGC122MCB5M |
| | 3,900 | 63.5 × 115 | 0.25 | 12.0 | ERWQ401LGC392MDB5M | | 1,500 | 63.5 × 96 | 0.25 | 5.42 | ERWQ551LGC152MD96M |
| | 4,700 | 63.5 × 130 | 0.25 | 13.9 | ERWQ401LGC472MDD0M | | 1,800 | 76.2 × 80 | 0.25 | 6.12 | ERWQ551LGC182ME80M |
| | 4,700 | 76.2 × 96 | 0.25 | 13.1 | ERWQ401LGC472ME96M | | 2,200 | 76.2 × 96 | 0.25 | 7.30 | ERWQ551LGC222ME96M |
| | 5,600 | 63.5 × 155 | 0.25 | 16.5 | ERWQ401LGC562MDF5M | | 2,700 | 76.2 × 115 | 0.25 | 8.73 | ERWQ551LGC272MEB5M |
| | 6,800 | 76.2 × 115 | 0.25 | 17.0 | ERWQ401LGC682MEB5M | | 3,300 | 76.2 × 130 | 0.25 | 10.2 | ERWQ551LGC332MED0M |
| | 8,200 | 76.2 × 155 | 0.25 | 21.2 | ERWQ401LGC822MEF5M | | 5,600 | 89 × 155 | 0.25 | 14.5 | ERWQ551LGC562MFF5M |
| | 10,000 | 89 × 130 | 0.25 | 22.0 | ERWQ401LGC103MFD0M | | | | | | |
| | 12,000 | 89 × 155 | 0.25 | 26.0 | ERWQ401LGC123MFF5M | | | | | | |
| 450 | 1,000 | 50 × 70 | 0.25 | 3.87 | ERWQ451LGC102MC70M | | | | | | |
| | 1,200 | 50 × 75 | 0.25 | 4.36 | ERWQ451LGC122MC75M | | | | | | |
| | 1,500 | 50 × 90 | 0.25 | 5.28 | ERWQ451LGC152MC90M | | | | | | |
| | 1,800 | 50 × 96 | 0.25 | 5.95 | ERWQ451LGC182MC96M | | | | | | |
| | 2,200 | 50 × 130 | 0.25 | 7.54 | ERWQ451LGC222MCD0M | | | | | | |
| | 2,700 | 63.5 × 96 | 0.25 | 8.34 | ERWQ451LGC272MD96M | | | | | | |
| | 3,300 | 63.5 × 115 | 0.25 | 9.97 | ERWQ451LGC332MDB5M | | | | | | |
| | 3,900 | 63.5 × 130 | 0.25 | 11.4 | ERWQ451LGC392MDD0M | | | | | | |
| | 3,900 | 76.2 × 96 | 0.25 | 11.1 | ERWQ451LGC392ME96M | | | | | | |
| | 4,700 | 63.5 × 155 | 0.25 | 13.6 | ERWQ451LGC472MDF5M | | | | | | |
| | 4,700 | 76.2 × 115 | 0.25 | 13.2 | ERWQ451LGC472MEB5M | | | | | | |
| | 5,600 | 76.2 × 130 | 0.25 | 15.2 | ERWQ451LGC562MED0M | | | | | | |
| | 6,800 | 76.2 × 155 | 0.25 | 18.1 | ERWQ451LGC682MEF5M | | | | | | |
| | 8,200 | 89 × 130 | 0.25 | 19.2 | ERWQ451LGC822MFD0M | | | | | | |

◆ **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 shorted 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 RWQ series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For the details, please contact a representative of Nippon Chemi-Con.