

GXL Series

- Long-Life version of GXE series
- For automobile modules and other high temperature applications
- Endurance with ripple current : 5,000 hours at 125°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

GXL

Longer life

GXE

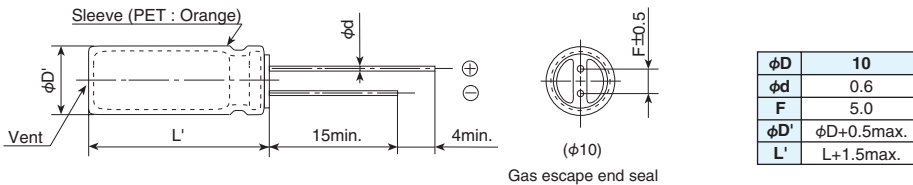


◆ SPECIFICATIONS

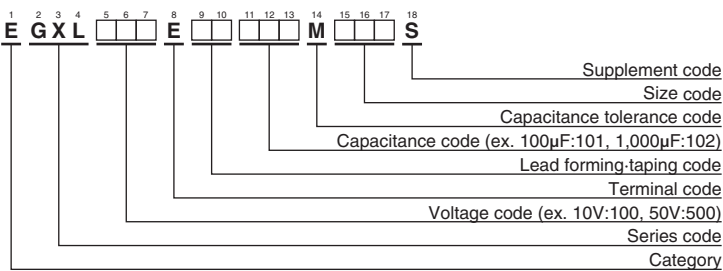
| Items | Characteristics | | | | | | |
|--|---|--------------------------------------|------|------|------|------|------------------|
| Category | -40 to +125°C | | | | | | |
| Temperature Range | -40 to +125°C | | | | | | |
| Rated Voltage Range | 10 to 50V _{ac} | | | | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | | | | |
| Leakage Current | I=0.03CV or 4μA, whichever is greater. (at 20°C, 1 minute) Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) | | | | | | |
| Dissipation Factor (tan δ) | Rated voltage (V _{ac}) | 10V | 16V | 25V | 35V | 50V | (at 20°C, 120Hz) |
| | tan δ (Max.) | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | |
| Low Temperature Characteristics (Max. Impedance Ratio) | Rated voltage (V _{ac}) | 10V | 16V | 25V | 35V | 50V | (at 120Hz) |
| | Z(-25°C)/Z(+20°C) | 3 | 2 | 2 | 2 | 2 | |
| | Z(-40°C)/Z(+20°C) | 6 | 4 | 4 | 4 | 4 | |
| 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 5,000 hours at 125°C. | | | | | | |
| | Capacitance change | ≤ ±30% 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°C after exposing them for 1,000 hours at 125°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 | ≤ ±30% of the initial value | | | | | |
| | D.F. (tan δ) | ≤300% of the initial specified value | | | | | |
| | Leakage current | ≤The initial specified value | | | | | |

◆ DIMENSIONS [mm]

- Terminal Code : E



◆ PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"

GXL Series

◆ **STANDARD RATINGS**

| WV (V _{ac}) | Cap (μF) | Case size φD×L(mm) | tan δ | Impedance (Ω max./20°C, 100kHz) | Rated ripple current (mA _{rms} /125°C, 100kHz) | Part No. |
|-----------------------|----------|--------------------|-------|---------------------------------|---|--------------------|
| 10 | 330 | 10 × 12.5 | 0.20 | 0.17 | 800 | EGXL100E□□331MJC5S |
| | 470 | 10 × 12.5 | 0.20 | 0.17 | 800 | EGXL100E□□471MJC5S |
| | 1,000 | 10 × 20 | 0.20 | 0.094 | 1,300 | EGXL100E□□102MJ20S |
| 16 | 220 | 10 × 12.5 | 0.16 | 0.17 | 800 | EGXL160E□□221MJC5S |
| | 330 | 10 × 12.5 | 0.16 | 0.17 | 800 | EGXL160E□□331MJC5S |
| | 470 | 10 × 16 | 0.16 | 0.12 | 1,050 | EGXL160E□□471MJ16S |
| 25 | 220 | 10 × 12.5 | 0.14 | 0.17 | 800 | EGXL250E□□221MJC5S |
| | 330 | 10 × 16 | 0.14 | 0.12 | 1,050 | EGXL250E□□331MJ16S |
| | 470 | 10 × 20 | 0.14 | 0.094 | 1,300 | EGXL250E□□471MJ20S |
| 35 | 100 | 10 × 12.5 | 0.12 | 0.17 | 800 | EGXL350E□□101MJC5S |
| | 220 | 10 × 16 | 0.12 | 0.12 | 1,050 | EGXL350E□□221MJ16S |
| | 330 | 10 × 20 | 0.12 | 0.094 | 1,300 | EGXL350E□□331MJ20S |
| 50 | 100 | 10 × 12.5 | 0.10 | 0.30 | 590 | EGXL500E□□101MJC5S |
| | 220 | 10 × 20 | 0.10 | 0.19 | 970 | EGXL500E□□221MJ20S |

□□ : Enter the appropriate lead forming or taping code.

◆ **RATED RIPPLE CURRENT MULTIPLIERS**

● Frequency Multipliers

| Capacitance(μF) | Frequency(Hz) | | | |
|-----------------|---------------|------|------|------|
| | 120 | 1k | 10k | 100k |
| 100 | 0.40 | 0.75 | 0.90 | 1.00 |
| 220 to 470 | 0.50 | 0.85 | 0.94 | 1.00 |
| 1,000 | 0.60 | 0.87 | 0.95 | 1.00 |

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.