

SCREW TERMINAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

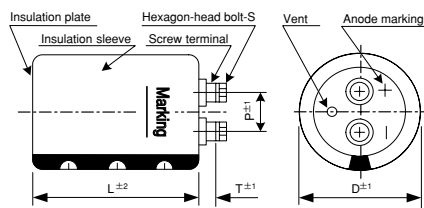
GXR3 Series

Useful of 8,000 hours at 105°C (Warranty of 5,000 hours at 105°C)

- Conform RoHS

Features

- GXR3 series has smaller case size (ave.10%) and higher ripple current (ave.17%) compared with GX2 series. These features are accomplished by new heat radiation structure and low ESR material.



(unit : mm)

| φ D | P | S | T | Cap material |
|-----|------|-------|-----|--------------|
| 64 | 28.6 | M5×10 | 6.0 | PPS |
| 77 | 32.0 | M6×12 | 4.5 | PPS |
| 90 | 32.0 | M6×12 | 3.0 | PPS |

Product Specifications

| Items | Specifications |
|----------------------------|--|
| Temperature range | -40°C ~ +105°C |
| Rated voltage | 400,450V.DC |
| Capacitance tolerance | ±20% (20°C, 120Hz) |
| Leakage current | 0.01CV (μA) or 5 mA, whichever is smaller or less(20°C, after 5 minutes) [C = nominal capacitance (μF), V = rated voltage (V)] |
| Dissipation factor | Less than the value specified in the standard products table. (20°C,120Hz) |
| Permissible ripple current | As specified in the standard products table. (105°C,120Hz) |
| Endurance | After the rated voltage with specified ripple current is applied at 85°C for 5000 hours: Capacitance change : Within ±15% of initial value Dissipation factor : Not more than 175% of initial value specified Leakage current : Not more than initial value specified |
| Others | JIS C 5101-4. |

Ripple current correction coefficient

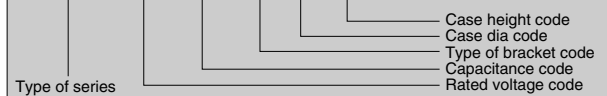
| Temperature (°C) | 40 | 60 | 85 | 105 | |
|------------------------|-------|------|------|------|------|
| Correction coefficient | 2.44 | 2.16 | 2.00 | 1.00 | |
| Frequency (Hz) | 50/60 | 120 | 300 | 1K | ≥10K |
| Correction coefficient | 0.7 | 1.0 | 1.1 | 1.3 | 1.4 |
| Forced wind(m/s) | <0.5 | 0.5≤ | | | |
| Correction coefficient | 1.0 | 1.1 | | | |

Terminal permissible currents: 60Arms for M5; 100Arms for M6.
Please use this type of capacitor at a terminal current below the permissible.

Product code : (Example) GXR3 type 400 V 10,000μF±20%

GXR3 2G 103 Y F 154

F case (φ: 90 mm) product



Bracket

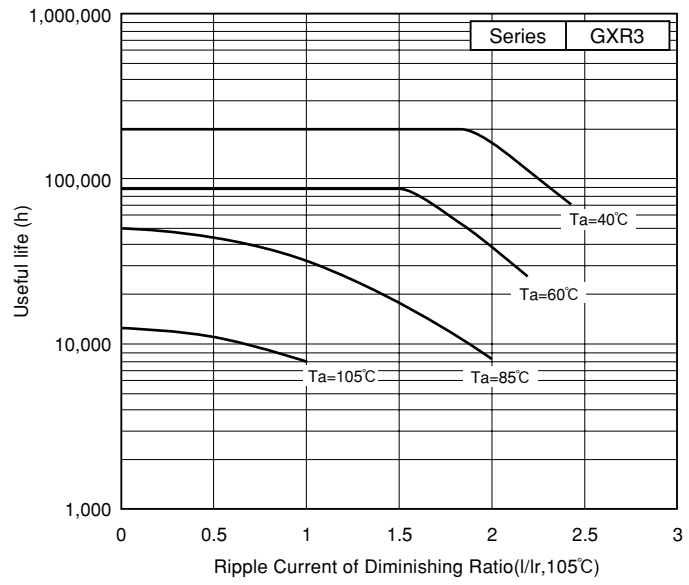
- See page 21, 22 for shapes and dimensions.
- Product names in the Standard Products Table correspond to the bracket for Type Y, but Type I bracket may be used (Type of bracket Code = I).
- If bracket are not necessary, enter "N" for the type of bracket code.
- Bracket will be delivered separately.

Standard Products Table

| Rated Voltage (V. DC) | Capacitance (μF) | Case size φDXL(mm) | tanδ 20°C, 120Hz | Ripple current 105°C, 120Hz (Arms) | ESR(typ.) 20°C, 100Hz (mΩ) | Z max 20°C, 10kHz (mΩ) | ESL(typ.) (nH) | Product name |
|-----------------------|------------------|--------------------|------------------|------------------------------------|----------------------------|------------------------|----------------|----------------|
| 400 | 3300 | 64×99 | 0.20 | 11.1 | 31 | 33 | 22 | GXR32G332YD099 |
| | 3900 | 64×112 | 0.20 | 12.0 | 26 | 27 | 22 | GXR32G392YD112 |
| | 4700 | 64×128 | 0.20 | 13.9 | 21 | 22 | 22 | GXR32G472YD128 |
| | | 77×100 | 0.20 | 14.0 | 21 | 22 | 23 | GXR32G472YE100 |
| | 5600 | 64×152 | 0.20 | 15.7 | 18 | 19 | 22 | GXR32G562YD152 |
| | | 77×113 | 0.20 | 15.4 | 18 | 19 | 23 | GXR32G562YE113 |
| | 6800 | 77×129 | 0.20 | 17.7 | 15 | 16 | 23 | GXR32G682YE129 |
| | 8200 | 77×170 | 0.20 | 21.1 | 12 | 12 | 23 | GXR32G822YE170 |
| | 10000 | 90×154 | 0.20 | 23.8 | 10 | 10 | 23 | GXR32G103YF154 |
| | 12000 | 90×171 | 0.20 | 27.1 | 8 | 10 | 23 | GXR32G123YF171 |
| 450 | 15000 | 90×194 | 0.20 | 31.1 | 8 | 10 | 23 | GXR32G153YF194 |
| | 18000 | 90×234 | 0.20 | 36.8 | 6 | 9 | 23 | GXR32G183YF234 |
| | 2700 | 64×112 | 0.20 | 9.8 | 38 | 40 | 22 | GXR32W272YD112 |
| | 3300 | 77×100 | 0.20 | 11.7 | 32 | 33 | 23 | GXR32W332YE100 |
| | 3900 | 64×152 | 0.20 | 13.0 | 26 | 28 | 22 | GXR32W392YD152 |
| | 4700 | 64×169 | 0.20 | 14.9 | 21 | 22 | 22 | GXR32W472YD169 |
| | 5600 | 77×170 | 0.20 | 17.2 | 18 | 19 | 23 | GXR32W562YE170 |
| | 6800 | 77×193 | 0.20 | 19.4 | 15 | 16 | 23 | GXR32W682YE193 |
| | 8200 | 90×154 | 0.20 | 21.1 | 12 | 12 | 23 | GXR32W822YF154 |
| | 10000 | 90×171 | 0.20 | 24.3 | 10 | 10 | 23 | GXR32W103YF171 |
| 12000 | 90×194 | 0.20 | 27.3 | 8 | 10 | 23 | GXR32W123YF194 | |
| | 15000 | 90×234 | 0.20 | 33.0 | 8 | 10 | 23 | GXR32W153YF234 |

Life time graph

Useful life depending on ambient temperature T_a and ripple current operating conditions I_r versus rated ripple current at 105°C, 120Hz



ALUMINUM ELECTROLYTIC CAPACITORS