

● Feature

- ☑ Endurance: **125°C 5,000h** (with ripple)
- ☑ Voltage: 400V_{dc} / 420V_{dc} / 450V_{dc}
- ☑ Capacitance: 39μF to 150μF
- ☑ Size: φ16×20L to φ18×40L
- ☑ Longer lifetime/high temperature than KXL series

● Recommended Application

- ☑ 5G Base station/ Fan less power supply
- ☑ Communication / General purpose power supply (Non-Automotive)
- ☑ PFC circuit
- ☑ High Temp / High reliability purpose

● Product Chart

- ☑ Recommended to replace from KXJ/KXL to GXM

*Line up for 105°C High ripple/Long life (160v and more ,Radial lead type)

KXJ

- Downsizing/Long Life
- **82μF** (450V, φ18×31.5L)
- 105°C **8,000 ~ 12,000h**

Since 2005.12

KXL

- Downsizing/Long life
- **100μF** (450V, φ18×30L)
- 105°C **10,000h / 12,000h**

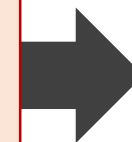
Since 2016.10

NEW GXM

- **High Temp, Long life**
- **100μF** (450V, φ18×30L)
- **125°C 5,000h**

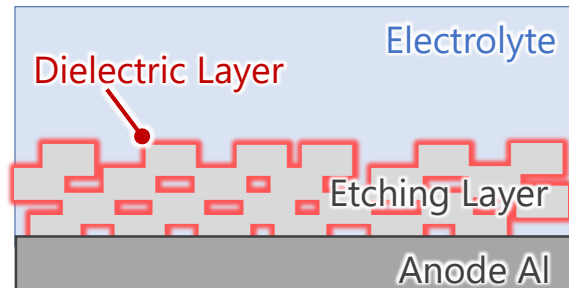


Since 2024.04



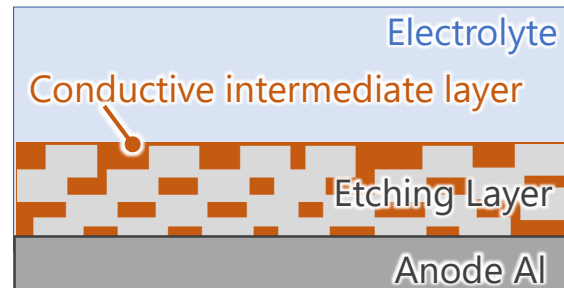
● Advantage

Conventional Foil



Dielectric layer

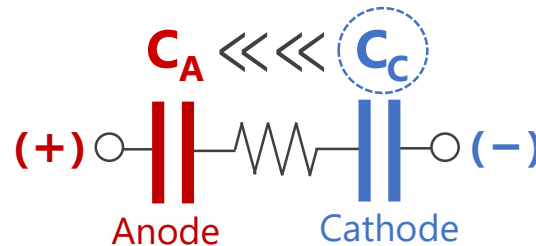
New Cathode Foil



Conductive intermediate layer

☑ Total capacitance calculation

$$C = \frac{C_A \times C_C}{C_A + C_C} \approx C_A$$



☑ Two advantages from KXL to GXM



① Longer life

② Higher heat resistance

Conventional
KXJ

Conventional
KXL

NEW
GXM

【Key Technologies】

Aluminum Foil (Anode)

- Optimized oxide layer
⇒ Higher capacitance

Electrolyte

- High heat resistance electrolyte

Aluminum Foil (Cathode)

- Increased foil capacitance
⇒ Increased total capacitance

New Cathode Foil

Patented

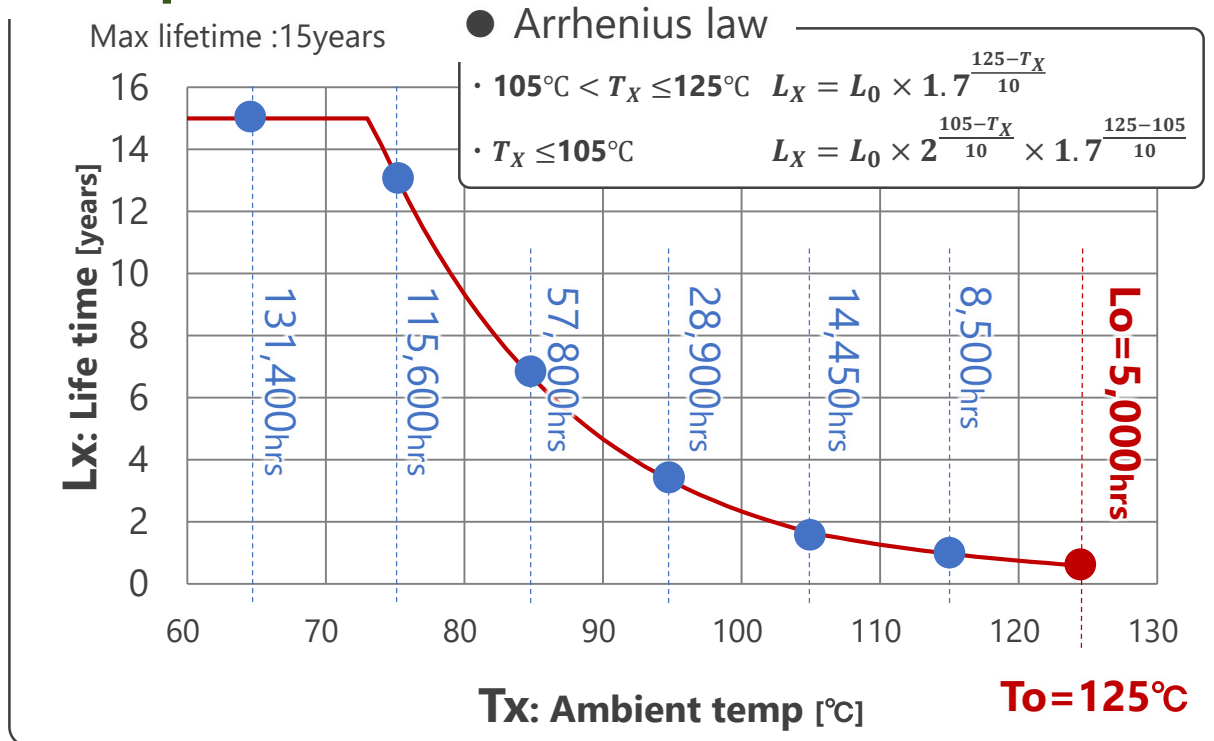
● Benefit / Evidence

➡ ① **Longer Life** • • • **Longer equipment life**

② **Higher heat resistance** • • • **Equipment downsizing, Reduced # of capacitors**

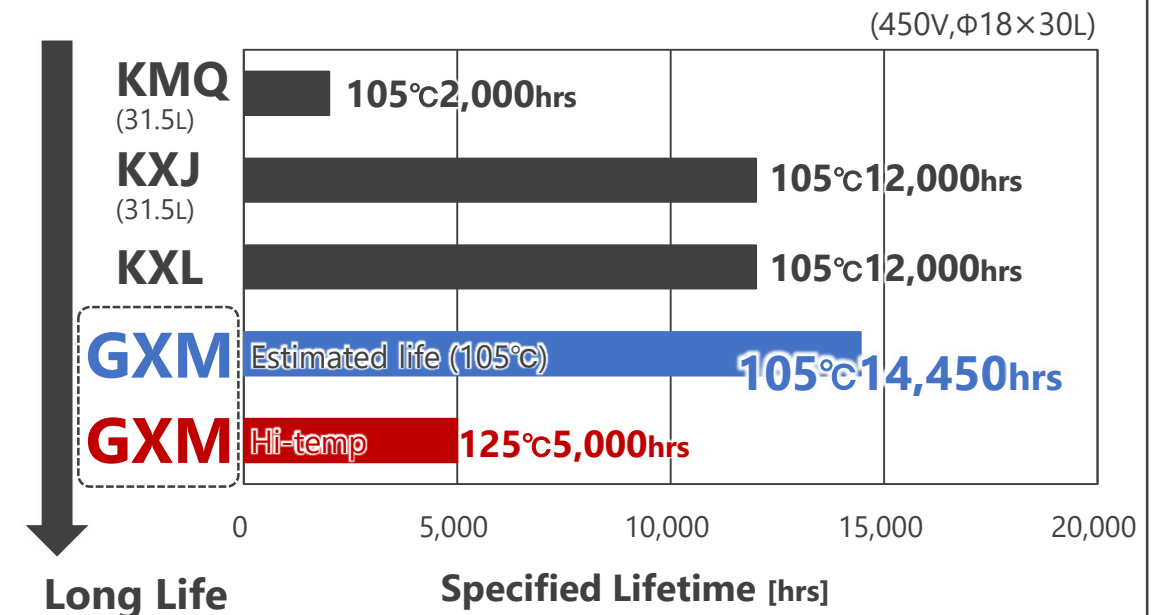


☑ Temperature acceleration from 125°C



☑ Required endurance for base station

Requirement: $\geq 105^{\circ}\text{C} 5,000\text{hrs}$



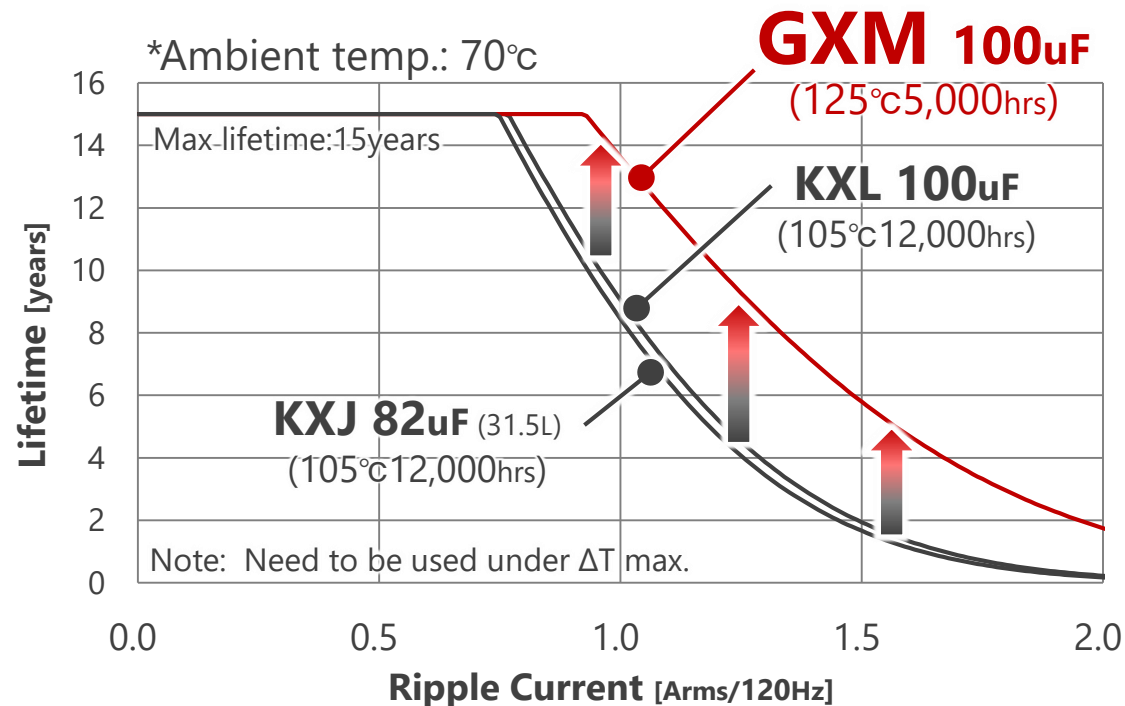
● Benefit / Evidence

➡ ① **Longer Life** • • • **Longer equipment life**

➡ ② **Higher heat resistance** • • • **Equipment downsizing, Reduced # of capacitors**



✓ Lifetime (450v, $\phi 18 \times 30L$)



✓ Reduced number (Fixed ripple current 10Arms)

