

● Feature

- ☑ Endurance: **105°C 2,000h** (with ripple)
- ☑ Voltage: 350V_{dc} to 400V_{dc}
- ☑ Capacitance: 160μF to 1,600μF
- ☑ Size: φ22×25L to φ35×60L
- ☑ **One size smaller** than KMR series

● Product Chart

- ☑ **Recommended to replace in KMQ/KMR to KHV**

*Line up for downsizing (Snap-in type)

KMQ

- Standard
- φ35×45L (400V680μF, 2.12Arms)
- 105°C 2,000h
- -25 to 105°C

Since 2000.11

KMR

- **Downsizing**
- φ35×40L (400V680μF, 2.03Arms)
- 105°C 2,000h
- -25 to 105°C

Since 2005.12

NEW

KHV

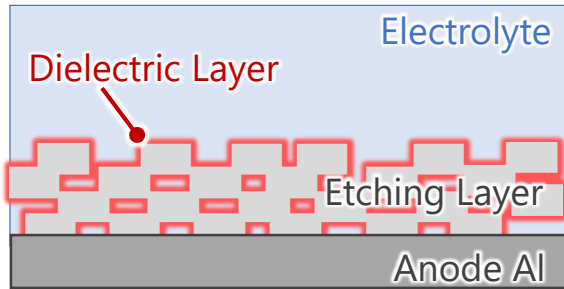
- **Higher Cap. / Higher ripple**
- **φ35×35L** (400V700μF, 2.72Arms)
- **105°C 2,000h**
- **-40 to 105°C**



Since 2024.05

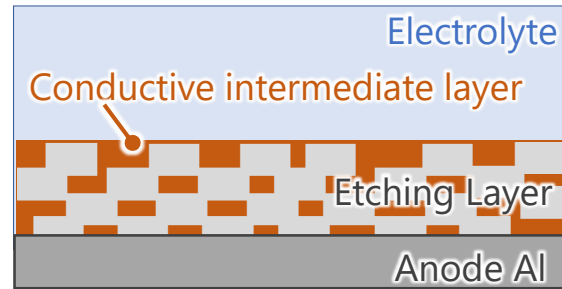
● **Advantage**

Conventional Foil



Dielectric layer

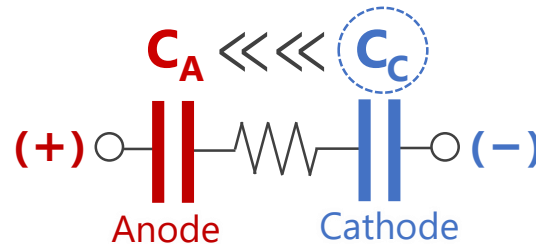
New Cathode Foil



Conductive intermediate layer

☑ **Total capacitance calculation**

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



☑ **Three advantages from KMR to KHV**



- ① **Higher capacitance**
- ② **Higher ripple current**
- ③ **Downsizing**

Conventional
KMR

【 Key Technologies 】

Separator

- Thin / high density

Aluminum Foil (Anode)

- Higher capacitance

Aluminum Foil (Cathode)

- Increased foil capacitance
⇒ Increased total capacitance

New Cathode Foil

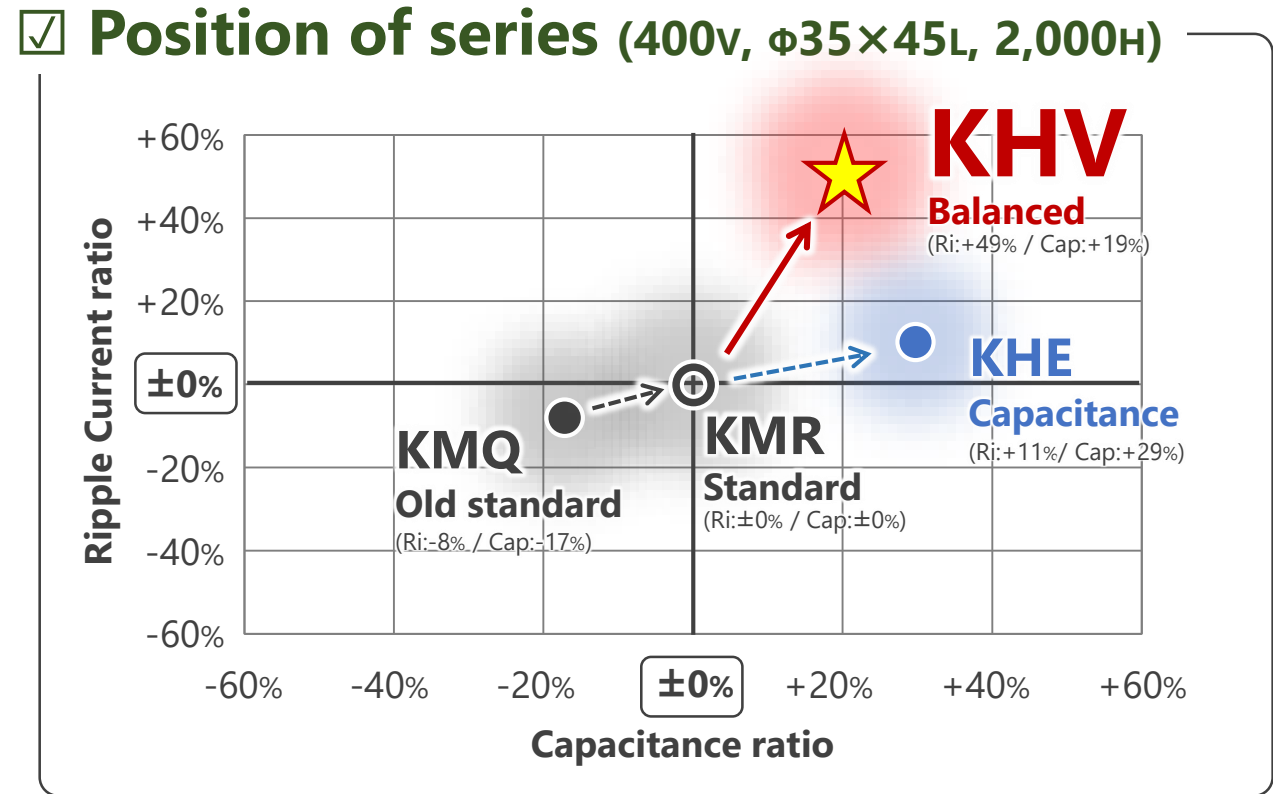
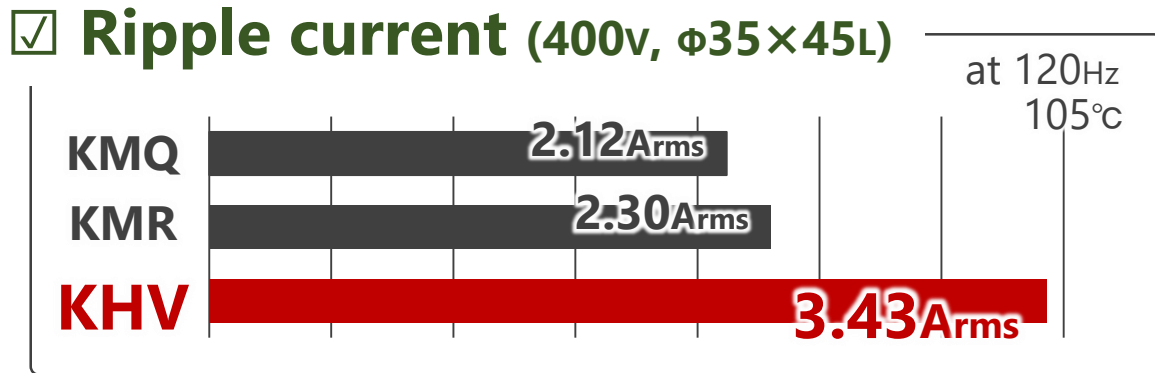
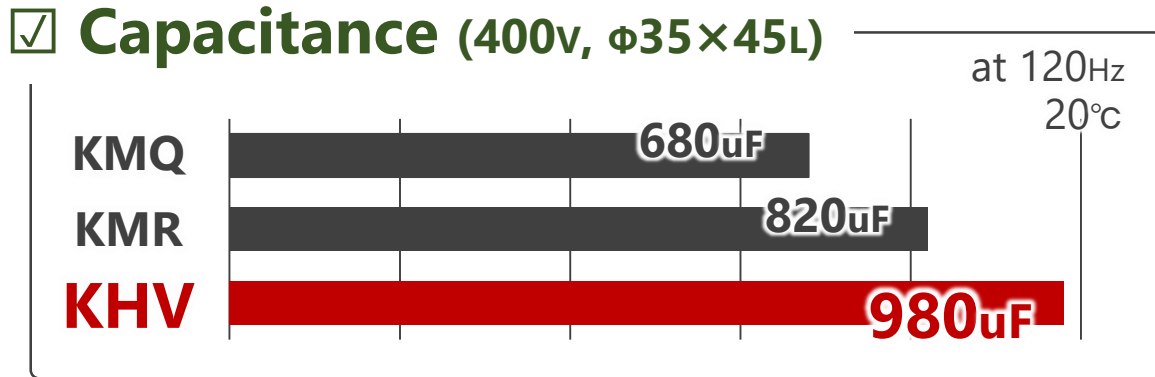


Patented

NEW
KHV

● **Benefit/Evidence**

- ➔ ① **Higher Capacitance** / ② **Higher ripple current** . . . **Reduce # of Capacitors**
- ③ **Downsizing** . . . **Equipment Downsizing, Low Height, Light Weight**

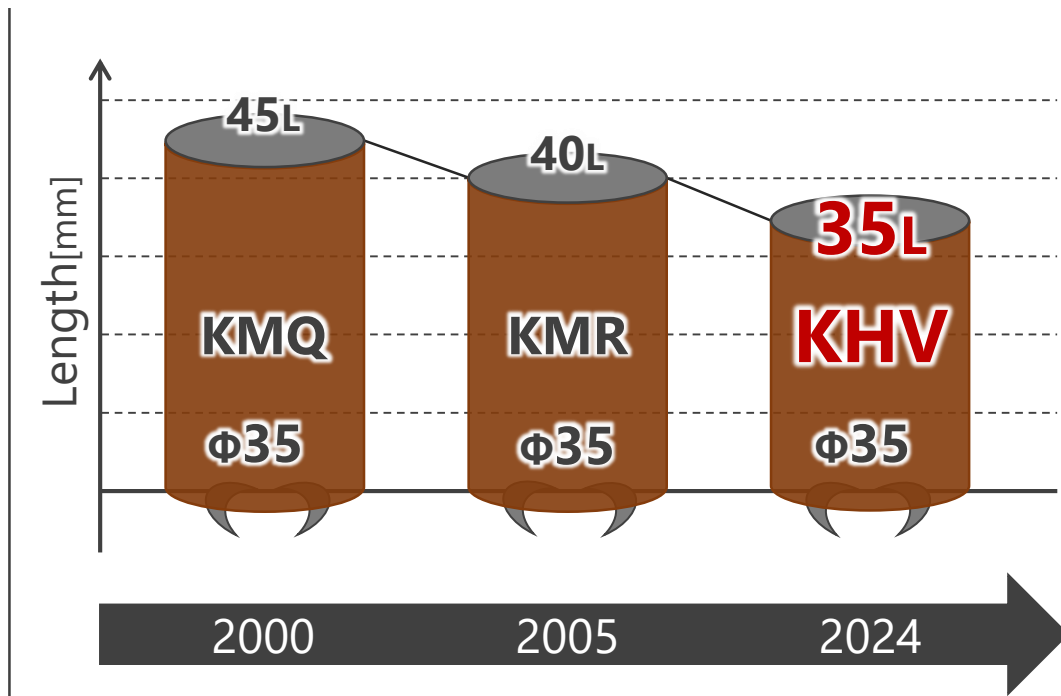


● Benefit/Evidence

- ➔ ① Higher Capacitance / ② Higher ripple current . . . Reduce # of Capacitors
- ➔ ③ Downsizing . . . Equipment Downsizing, Low Height, Light Weight



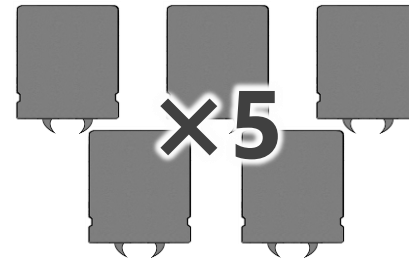
☑ **Comparison at height** (400V680uF, φ35)



☑ **Reduced number** (Fixed total capacitance)

KMR

400V 680uF (φ35×40L)
2.03Arms/pc

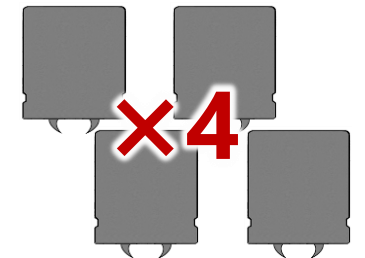


3,400uF (10.2Arms)

2005

KHV

400V 840uF (φ35×40L)
3.09Arms/pc



3,360uF (12.4Arms)

2024