SMD Type Conductive Polymer

Hybrid Aluminum Electrolytic Capacitor

High heat resistance Super low ESR



Feature

- ☑ Endurance: 135°C 4,000h (with ripple)
- ☑ Voltage: 25Vdc to 63Vdc
- ☑ Capacitance: 33uF to 560uF
- \square Size: $\Phi 8 \times 10$ L to $\Phi 10 \times 16.5$ L
- ☑ Bias humidity: 85°C/85%RH 2,000h
- ☑ Guranteed short time operating temp. 150°c (150°c300h+135°c3,000h)

Product Chart

☑ Recommenended to replace in HXC/HXE to HXF

*Lineup for high heat resistance/super low ESR (SMD type)

Since 2016.02

HXC

- · 125°c Standard
- 6.8uF to 560uF
- 125°c 4,000h

HXE

- 135^oc Standard
- 22uF to 560uF
- 135°C 4,000h

Since 2017.11

Recommend Application

- ☑ For high temperature / High reliablity usage
- ☑ For automotive (Ex. DC-LINK)
- ☑ For power supplies (Base station)

2022.08 **Upgrade!**

HXF

- Added new case size
 (Φ10×12.5L ,Φ10×16.5L)
- Guranteed short time150°€
- Higher ripple current
- 33uF to 560uF
- · 135°C 4,000h



Since 2021.12



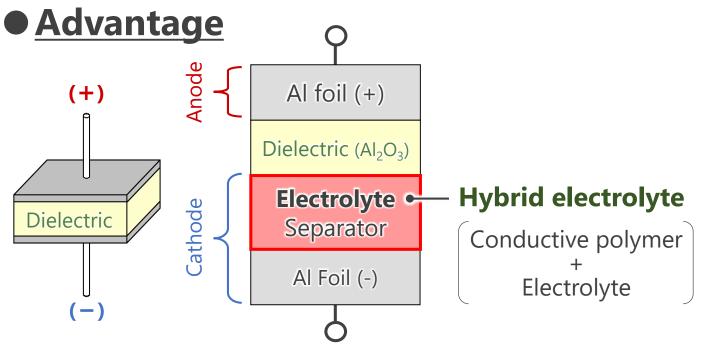


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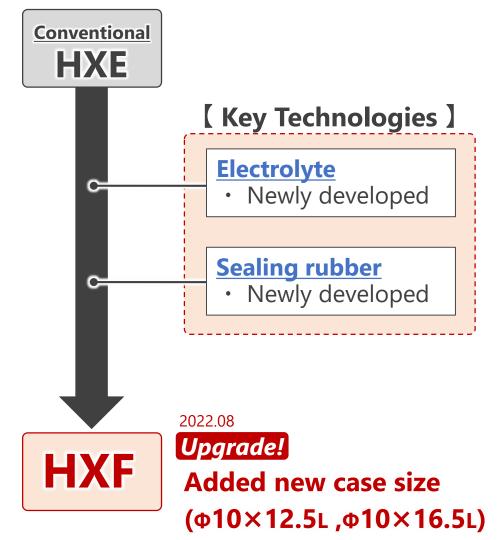
High heat resistance Super low ESR







- **1** Super low ESR above 25v
- **2 Wear-out failure** (Open Circuit & Safety)
- **3 Higher ripple current**

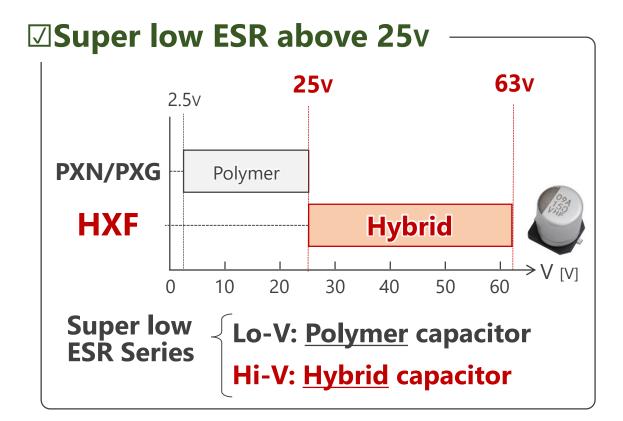






Benefit/Evidence

- 1 Super low ESR above 25v / 2 Wear-out failure (Open circuit & Safety)
 - **③ Higher ripple current · · · Downsizing, Reduced # of capacitors**



Wear-out failure (Safety) Early failure period Random failure period Wear-out failure period Period

HXF is not random failure product,
 but <u>Wear-out failure</u> product.

<Bathtub Curve>

Time

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Benefit/Evidence

- **1** Super low ESR above 25v / 2 Wear-out failure (Open circuit & Safety)
- **■** 3 Higher ripple current · · Downsizing, Reduced # of capacitors

