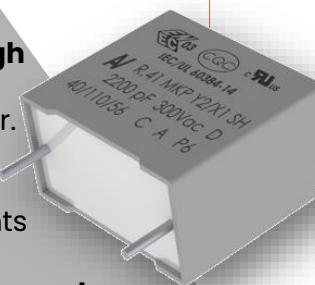


The R41D V234 is an extension of R41D **high dv/dt** series of Y2/X1 radial metallized polypropylene EMI suppression capacitor. On top of high dv/dt, the new extension with c-spec V234 doubles the **Irms** performance to carry more ripple currents



R41D V234 also withstands **harsh environment** and **high temperature**, thus inherits R41D's **extended lifetime**

The combination of all above makes R41D V234 an ideal choice for **EMI filtering in wide-bandgap-component-based power conversion applications**

Quick Facts

Capacitance Range: 0.001 – 0.22 μ F

Rated Voltage VAC : 300 VAC (50/60 Hz)

Recommended DC Voltage: 1200 VDC

High dv/dt: 6000/4500/3000 V/ μ s (pitch 10/15/22.5mm)

High Irms (with c-spec V234): ~2x compared to standard

Contact & Support

For special requests (custom designs, lifetime extensions, etc.), contact regional Product Managers.



CAPACITORS

Film capacitor

High Current Y2/X1 Film Capacitors



Key Selling Points

Features

High dv/dt

High Irms current (with c-spec V234)

THB Grade at AC and DC voltages

Max operation temperature 125°C/2khr

Approvals: ENEC, UL, cUL, CQC

AEC-Q200 compliant

* Based on 100nF at 100kHz/85°C, refer to series catalogue for more details

**85°C/85% R.H/300Vrac 1000 hrs ($\geq 2.2nF$) or 500 hrs ($< 2.2nF$); 65°C/93% R.H/1000Vdc 1600 hrs

Target Applications

- **AC Input Y2/X1**
- **HVDC Filter**
- **Three-Phase Output**
- **3-phase UPS**
- **Automotive OBC, DC/DC**
- **Solar Inverter & Energy Storage**
- **Charging stations**

Customer Value

Up-to 7.5x transient current for WBG/Pulse applications

Up-to 2x ripple current* for EMI filtering reduces the count of caps

Reliability in harsh environments extends lifetime in AC and DC apps

Reliability in high temperature applications extends lifetime

Global deployment

Suitable for automotive applications

Market Advantages

- If you are working on a power conversion system based on **wide bandgap** transistors, and need a safety capacitor at the Y position, R41D V234 is an ideal choice which combines **high dv/dt and Irms** performances for **the first time in the industry**. It helps reduce the count of capacitors needed to filter the transient and ripple currents which are often seen in wide bandgap systems, thus makes your design **easier and cost effective**.
- You can also benefit from R41D high **THB grade** and **high temperature**, which can help you improve your system's **reliability** in harsh/hot environments, and **extend the lifetime** of your product
- Safety approvals and AEC-Q200 compliance eases **global deployment** in both **automotive** and **non-automotive** applications