



AEM Automotive Grade Surface Mount Fuses Meet New Regulation of AEC-Q200 Rev E

By Klaus Jing & Dr. Liwu Wang



San Diego, California, Oct 08, 2023 – We are pleased to announce that all **AEM automotive grade surface mount fuses** meet new regulations of **AEC-Q200 Rev E**. The new **AEC-Q200 Rev E** defines clear requirements for fuses performances before and after the stress tests which set a higher standard for safety and reliability. The **AEC-Q200 Rev E** provides a wide range of performance reliability and high I^2t values to ensure high inrush current withstand capability, offering an array of component options and design flexibility in providing circuit protection against abnormal overloading and surging conditions.

AEM is well-known in the industry and market for providing one of the most extensive and comprehensive surface mount fuses for circuit protection. **AEC-Q200 Rev E** qualified AEM fuses are manufactured at the ISO14001 & IATF16949 certified facility. AEM surface mount fuses are setting a new standard for reliable performance for automotive electronics and electric vehicle applications. AEM automotive grade product portfolio includes **AirMatrix[®]** (Wire-In-Air Surface Mount Fuse), **SolidMatrix[®]** (Co-fired Solid Body Surface Mount Fuse), **QMF High Power Fuse** and **Polymer PTC Resettable Fuses**.

AEM's patented breakthrough technologies and lean manufacturing facilities ensure superior quality and reliability at the best value.

AirMatrix[®] Platform (Wire-In-Air Surface Mount Fuse)

AEM QA2410/QA1206 Series

- Sealed wire-in-air structure
- Unique construction enhances reliability
- Highly reliable end-cap construction
- High withstanding capability for the in-rush current
- Voltage ratings from 32Vdc to 250Vdc
- Highest current rating in the industry, up to 20A
- Operating temperature: -55°C-125°C
- Narrow DCR distribution and consistent electrical performance
- Suitable for automotive grade per AEC-Q200 Rev E qualification



SolidMatrix® Platform (Co-fired Solid Body Surface Mount Fuse)

AEM QF1206/QF0603 Series

- Superior thermal and mechanical performance
- Stable at high temperature and high stress
- Operating temperature ranges -55 to 150°C
- High-reliability anti-sulfur construction
- Very fast acting and high current capable
- Mechanical strength and excellent thermal properties
- Monolithic glass ceramic body with silver fusing element
- Silver termination with nickel and pure-tin plating
- Voltage rating from 24Vdc to 65Vdc
- Suitable for automotive grade per AEC-Q200 Rev E qualification

QMF Platform (High Power Fuse)

- Thermal simulation on critical fuse element design with optimized & safe fuse performances
- Application voltage rating from 75Vdc to 125Vdc
- Proprietary special arc extinguishing filler material
- High interrupting current ratings
- Single piece of metal functioning as fuse link and surface mount terminals (100% interconnection reliability)
- Reliable and predictable performance for long life
- Single standardized 2822 footprint / miniaturized package for current rating from 20A to 125A
- Low DC resistance (DCR) – Minimizes excessive power loss
- High interrupting ratings – excellent inrush current withstanding capability
- Further high-power surface mount fuses up to 200A are available
- Suitable for automotive grades per AEC-Q200 Rev E qualification

The AEC-Q200 Rev E qualified fuses are ideal for use in a wide range of automotive electronics design and applications, including but not limited:

- Battery Management Systems (BMS)
- Battery Pack
- DC/DC converters
- Ignition Systems
- Infotainment and Navigation
- Smart Door Security
- ADAS, Radar, and EV Chargers

For More Information

Additional information on the **AEC-Q200 Rev E** qualified products is available per request. For the business and technical questions, please contact:

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