

# AEM Components' Automotive-Grade Surface-Mount Fuses Deliver Performance and Reliability Improvements

Parts are AEC-Q200 qualified and manufactured in a TS16949 certified facility; unique configuration of wire-in-air fuses adds to reliable performance under extreme fault conditions; co-fired monolithic solid body fuse construction assures reliable performance over wide range of temperature/vibration

SAN DIEGO, Calif.— November 8, 2016— AEM Components announces the availability of its new line of AEC-Q200 qualified surface-mount fuses designed specifically for reliable operation in high-stress automotive applications. The new wire-in-air AirMatrix (QA Series) and solid body SolidMatrix (QF Series) fuses are manufactured in AEM's TS16949-certified facility. The two product series together offer automotive design engineers with products that assure reliable performance in applications ranging from engine controls and battery-management systems to infotainment and communications systems.

The QA Series features the industry's highest current ratings – up to 20A/250V. Its proprietary, hermetically-sealed wire-in-air structure assures consistent electrical performance The QF solid-body fuses utilize AEM's proprietary, anti-sulfur end-cap construction and provide superior mechanical and thermal stability over a wide temperature range (-55°C to +150°C).

"The fusible element in the QA Series wire-in-air devices is uniformly straight across the internal cavity and externally bonded to the endcap through the plating process," reports Jeffers Liu, AEM Components' Vice President of Sales and Marketing. "Competitive units utilize solder beads inside a ceramic tube to bond the fusible link. This traditional approach has the drawback of non-uniform performance and potential internal connection failure caused by mechanical/thermal stress like vibration or bending, or by common soldering defects like cold joints or poor wetting. Under high-stress conditions, the solder can vaporize, causing prolonged arcing that can lead to package failure and damage to the circuit board and surrounding components. In comparison, our automotive-grade fuses are designed specifically to enhance reliability in harsh environments by eliminating the solder joint."

The QA Series is offered in two fast-acting versions: a 2410 package with a 0.5-20A/65-250V rating and a 1206 package rated at 1.5-15A/32-65V. Auto-grade QF parts are offered in fast-acting and time-lag versions, and in 1206 and 0603 versions with current ratings up to 8A.

## **Pricing and Availability**

The QA/QF series is now available in mass quantities. Prices range from \$0.065 to \$0.20 per unit for OEM quantities. For samples, interested parties can contact a local AEM <u>Distributor</u>.

### About AEM Components (USA), Inc.

With over 25 years of experience, AEM Components (USA), Inc. has become a leading manufacturer in the surface mount electronic components industry, and it is one of the few companies to have its own unique technology platform. AEM's surface mount fuses; ESD suppressors and multilayer varistors (MLVs) provide circuit protection for commercial electronic products. The company also offers chip inductors and beads for electromagnetic (EMI) signal filtering. AEM possesses patented process technologies as well as proprietary nanoparticle composite material technologies, equipment technologies and computer simulation capabilities. AEM houses research and development centers, manufacturing facilities and sales offices in the United States and throughout Asia. More information about AEM can be found at www.aemcomponents.com.

## Editorial Contact

Vanessa Dumlao AEM Components (USA), Inc. 858.750.6107 vdumlao@aemcomponents.com

#### Agency Contact:

Greg Evans, P.E. WelComm, Inc. 858.633.1911 greg@welcomm.com