AEC-Q101-qualified for automotive use

Protek Devices has announced that three of its electrostatic discharge protection diodes are now AEC-Q101 qualified. This makes the components suitable for circuit protection in tough automotive environments.

The PAM1CAN is designed to protect two automotive CAN lines from electrostatic discharges (ESD) and other transients (Photo: Protek)

THE NOW QUALIFIED COMPONENTS are the PAM1CAN, PAM2CAN, and PAM1FLEX electrostatic discharge (ESD) protection diodes. Collectively, these devices also cover circuit protection in related applications such as CAN, Devicenet, and Flexbus lines.

The AEC (Automotive Electronics Council) Component Technical Committee is the standardization body for establishing standards for electronic components. Components meeting these specifications are suitable for use in harsh automotive environments without additional component-level qualification testing.

The Protek products also already met other standards. They are compatible with IEC 61000-4-2 (ESD): air 15 kV, contact 8 kV; with IEC 61000-4-4 (EFT): 40 A, 5/50 ns; and with IEC 61000-4-5 (surge): 3A, 8/20 µs. They are also RoHS and Reach compliant.

The PAM1CAN and PAM1FLEX feature 200 W peakpulse power per line (typical = 8/20 µs) while the PAM2CAN boasts 230 W peak pulse power per line. All three parts deliver circuit protection in up to two lines. ESD protection is >25 kV. The components are provided in a molded Jedec SOT-23 package.

Protek Devices is a privately held semiconductor company that offers a product line of overvoltage protection and overcurrent circuit protection components. These include transient voltage suppressors (TVS arrays), avalanche breakdown diodes, steering diode TVS arrays, PPTC devices, and electronics SMD chip fuses. These components deliver circuit protection in various electronic systems against lightning; electrostatic discharge; nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference/radio frequency interference (EMI/RFI).

The company also offers interface and linear products. These include analog switches, multiplexers, LED drivers, LED wafer die for ESD protection, audio control ICs, RF, and related high frequency products. The company maintains its headquarters in Tempe, Ariz (US).