

AQ12CANA-02HTG Series Automotive Grade TVS Diode Arrays

12V, 28pF, 12A in SOT23-3L for CAN Bus Protection

Problem/Solution

The AQ12CANA-02HTG bidirectional TVS diodes utilize a proprietary silicon avalanche technology to provide electronic equipment with high electrostatic discharge (ESD) protection. These TVS diodes absorb repetitive ESD strikes of $\pm 30\text{kV}$ (contact and air discharge per IEC 61000-4-2) safely, without any performance degradation. In addition, it also safely dissipates a 12 A 8/20 μs surge event (IEC 61000-4-5, 2nd Edition).

Technical resources *(Click on below icons to learn more)*

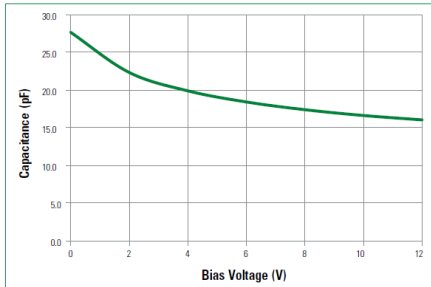


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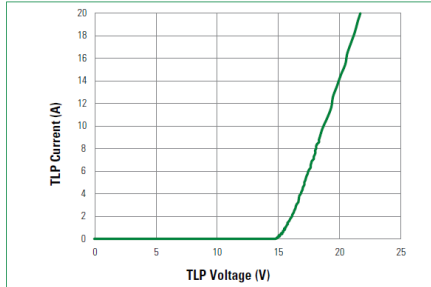


Datasheet

Capacitance vs. Reverse Bias



Positive Transmission Line Pulsing (TLP) Plot



Benefits

- Safely dissipates high surge events
- Compliant with numerous IEC standards for ESD suppression and lightning surge protection
- AEC-Q101 Qualified and PPAP capable
- Moisture Sensitivity Level (MSL-1)



Features

- Reverse standoff voltage: 12 V
- Maximum surge tolerance: 12 A 8/20 μs (IEC 61000-4-5 2nd edition)
- ESD strikes: $\pm 30\text{ kV}$ contact/air (IEC 61000-4-2)
- ESD: 330 pF 330 Ω , $\pm 30\text{ kV}$ contact/air (ISO 10605)
- EFT: 40 A, 5/50 ns (IEC 61000-4-4)

Markets/Applications

- Automotive
- ADAS Control Units
- Body Control Units
- Electronic Control Units
- Factory Automation
- Lightning Control (DALI)
- Powertrain Control Units
- CAN Bus



Expertise Applied | Answers Delivered

AQ15CANA-02HTG Series Automotive Grade TVS Diode Arrays

15V, 21pF, 9A in SOT23-3L for CAN Bus Protection

Problem/Solution

The AQ15CANA-02HTG bidirectional TVS diodes utilize a proprietary silicon avalanche technology to provide electronic equipment with high electrostatic discharge (ESD) protection. These TVS diodes absorb repetitive ESD strikes of ± 30 kV contact and air discharge safely (per IEC 61000-4-2), without any performance degradation. In addition, it also safely dissipates a 9 A 8/20 μ s surge event (per IEC 61000-4-5, 2nd Edition).

Technical resources *(Click on below icons to learn more)*

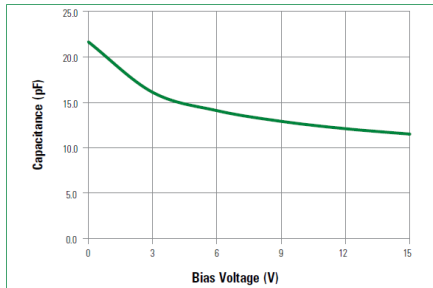


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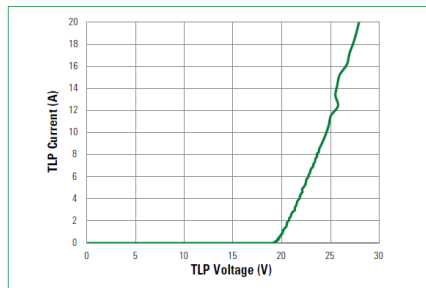


Datasheet

Capacitance vs. Reverse Bias



Positive Transmission Line Pulsing (TLP) Plot



Benefits

- Safely dissipates high surge events
- Compliant with numerous IEC standards for ESD suppression and lightning surge protection
- AEC-Q101 Qualified and PPAP capable
- Moisture Sensitivity Level (MSL-1)



Features

- Reverse standoff voltage: 15 V
- Maximum surge tolerance: 9 A 8/20 μ s (IEC 61000-4-5 2nd edition)
- ESD strikes: ± 30 kV contact/air (IEC 61000-4-2)
- ESD: 330 pF 330 Ω , ± 30 kV contact/air (ISO 10605)
- EFT: 40 A, 5/50 ns (IEC 61000-4-4)

Markets/Applications

- Automotive
- ADAS Control Units
- Body Control Units
- Electronic Control Units
- Factory Automation
- Lightning Control (DALI)
- Powertrain Control Units
- CAN Bus

