



All products listed in this brochure are AEC-Q101 qualified

Engine Vehicle Control Unit - 12 V / 24 V

- 3 Engine Cooling
- 5 Exhaust Control Systems

Powertrain - Injection Control and Fuel Pump

- 8 Direct Injector Control
- 10 Piezo Injection Control
- **12** Fuel Pump Control

Chassis Control

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- 17 Transmission ECU, Double Clutch BLDC

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- 24 Interior LED Lighting

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- 29 Electronic Stability Program (ESP)
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ENGINE VEHICLE CONTROL UNIT - 12 V / 24 V

ENGINE COOLING EXHAUST CONTROL SYSTEMS



ENGINE VEHICLE CONTROL UNIT – 12 V / 24 V ENGINE COOLING





Schottky Rectifiers

V20DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A, 120 V for freewheeling and high frequency rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×4 A, 200 V for high frequency switching, 22 ns recovery, $T_i max = 175$ °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, T_imax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Standard Rectifiers

SE10F Series – Miniature-Package Rectifiers for Rail to Rail Signal Line Protection

- High ESD voltage and surge current capability
- Compatible with SOD-123 pad layout and package size



TVS

SM8S10AT thru SM8S43AT – High Power TVS for Main Load Dump Suppression for Rail to Rail Signal Line Protection

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, T_imax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges



Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2×3 A, 200 V for high frequency switching, 25 ns recovery, $T_j max = 175$ °C
- SMPC (TO-277A) package with 1.1 mm low profile



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode





ENGINE VEHICLE CONTROL UNIT – 12 V / 24 V ENGINE COOLING





Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 A, 200 V for high frequency switching, 20 ns recovery, T_jmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

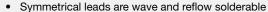
- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification







Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



ENGINE VEHICLE CONTROL UNIT – 12 V / 24 V **EXHAUST CONTROL SYSTEMS**





Schottky Rectifiers

V8PAM12HM3 – High Current Density, High Voltage Schottky Rectifiers

- 8 A, 120 V for freewheeling and high frequency rectification
- SMPA (DO-221BC) package with 0.95 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power TVS for Main Load Dump Suppression

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V20DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A, 120 V for freewheeling and high frequency rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power TVS for Main Load Dump Suppression

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSX1P Series – Miniature Rectifiers With High ESD Capability for Rail to Rail Signal Line and Power line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power TVS for Main Load Dump Suppression

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE10F Series – Miniature-Package Rectifiers for Rail to Rail Signal Line Protection

- · High ESD voltage and surge current capability
- Compatible with SOD-123 pad layout and package size



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



Small Signal Switching Diodes

BAV21WS – Fast Switching Diode for General Purpose

• Silicon epitaxial planar diode



Ultrafast Rectifiers

AU3P Series – High Current Density Ultrafast Rectifiers With High Avalanche Capability

- 3 A, up to 1 kV 20 mJ avalanche capability with fast switching characteristics
- SMPC (TO-277A) package with low profile of 1.1 mm



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- Metal on silicon Schottky diode protected by PN junction guard ring
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



ENGINE VEHICLE CONTROL UNIT - 12 V / 24 V **EXHAUST CONTROL SYSTEMS**











BZD27B Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable





Zener Diodes

BZD27C-M Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- · Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



POWERTRAIN - INJECTION CONTROL AND FUEL PUMP

DIRECT INJECTOR CONTROL PIEZO INJECTION CONTROL FUEL PUMP CONTROL



POWERTRAIN – INJECTION CONTROL AND FUEL PUMP DIRECT INJECTOR CONTROL





Schottky Rectifiers

SS8PH9HM3, SS8PH10HM3 – High Current Density, High Voltage Schottky Rectifiers



- 8 A, 100 V for freewheeling and high frequency rectification
- SMPC (TO-277A) package with 1.1 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V8PAM12HM3 – High Current Density, High Voltage Schottky Rectifiers

- 8 A, 120 V for freewheeling and high frequency rectification
- SMPA (DO-221BC) package with low profile of 0.95 mm



TVS

SM6S10A thru SM6S36A – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

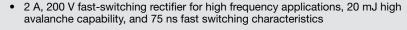
SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

AU3P Series – High Current Density Ultrafast Rectifiers With High Avalanche Capability



• SMPC (TO-277A) package with low profile of 1.1 mm



Small Signal Schottky Diodes

BAT54 – Single and Dual Construction Protect Against Excessive Voltage

- Very low turn-on voltage and fast switching
- PN junction guard ring protects against excessive voltage, such as electrostatic discharges



Ultrafast Rectifiers

ESH2P Series – Ultrafast Rectifiers With Wide Operating Temperature Range

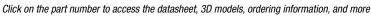
- 2 A, 200 V fast switching rectifier for high frequency applications, 20 mJ high avalanche capabiliy, and 75 ns fast switching characteristics
- SMP (DO-220AA) package with high operating temperature to +175 °C



Small Signal Switching Diodes

BAV23C – Fast Switching Dual Diode With Common Cathode

• Silicon epitaxial planar diode





POWERTRAIN - INJECTION CONTROL AND FUEL PUMP **DIRECT INJECTOR CONTROL**





Ultrafast Rectifiers

VS-1EFH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Ultrafast Rectifiers

VS-2EJH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Ultrafast Rectifiers

VS-6CSH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching , 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, Timax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Timax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



7ener Diodes

BZD27C-M Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 % ESD and surge rated
- Symmetrical leads are wave and reflow solderable



POWERTRAIN – INJECTION CONTROL AND FUEL PUMP PIEZO INJECTION CONTROL





Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- · High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching , 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- · High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

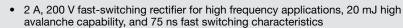


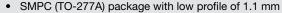
- 2×4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

AU3P Series – High Current Density Ultrafast Rectifiers With High Avalanche Capability







TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



AUTOMOTIVE

Ultrafast Rectifiers

ESH2P Series – Ultrafast Rectifiers With Wide Operating Temperature Range

- 2 A, 200 V fast switching rectifier for high frequency applications, 20 mJ high avalanche capabiliy, and 75 ns fast switching characteristics
- SMP (DO-220AA) package with high operating temperature to +175 °C



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains





POWERTRAIN – INJECTION CONTROL AND FUEL PUMP PIEZO INJECTION CONTROL





Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Timax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- 500 mW power dissipation, excellent thermal characteristics, R_{thJA} 130 k/W
- Symmetrical leads are wave and reflow solderable



POWERTRAIN – INJECTION CONTROL AND FUEL PUMP **FUEL PUMP CONTROL**





Schottky Rectifiers

V35DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 35 A, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V35PWM10HM3 – High Current Density, High Voltage Schottky Rectifiers

- 35 A, 100 V Schottky rectifiers for freewheeling and rectification
- SlimDPAK (TO-252AE) package with 1.3 mm low profile; 120 V and 150 V types available



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- · High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT54 – Single and Dual Construction Protect Against Excessive Voltage

- · Very low turn-on voltage and fast switching
- PN junction guard ring protects against excessive voltage, such as electrostatic discharges



Small Signal Switching Diodes

BAV23C – Fast Switching Dual Diode With Common Cathode

• Silicon epitaxial planar diode



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



POWERTRAIN – INJECTION CONTROL AND FUEL PUMP **FUEL PUMP CONTROL**





Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

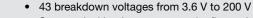
BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification



• Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- Symmetrical leads are wave and reflow solderable



CHASSIS CONTROL

ELECTRIC POWER STEERING (BLDC MOTOR DRIVE) TRANSMISSION ECU, DOUBLE CLUTCH BLDC



CHASSIS CONTROL ELECTRIC POWER STEERING (BLDC MOTOR DRIVE)





Schottky Rectifiers

V35DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 35 A, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V60D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 30 A \times 2, 100 V Schottky rectifiers for freewheeling and high frequency rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, 3 A current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- Metal on silicon Schottky diode protected by PN junction guard ring
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

BAV21WS – Fast Switching Diode for General Purpose

• Silicon epitaxial planar diode



CHASSIS CONTROL ELECTRIC POWER STEERING (BLDC MOTOR DRIVE)





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



CHASSIS CONTROL TRANSMISSION ECU, DOUBLE CLUTCH BLDC





Schottky Rectifiers

V35DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 35 A, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V60D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 30 A \times 2, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode



CHASSIS CONTROL TRANSMISSION ECU, DOUBLE CLUTCH BLDC





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 x 4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



BODY ELECTRONICS

COMFORT, DOOR, WINDOW CONTROLS INFOTAINMENT, NAVIGATION, AUDIO INTERIOR LED LIGHTING



BODY ELECTRONICS COMFORT, DOOR, WINDOW CONTROLS





Schottky Rectifiers

V20DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A, 120 V for freewheeling and high frequency rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V35PWM10HM3 – High Current Density, High Voltage Schottky Rectifiers

- 35 A, 100 V Schottky rectifiers for freewheeling and rectification
- SlimDPAK (TO-252AE) package with 1.3 mm low profile; 120 V and 150 V types available



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- Metal on silicon Schottky diode protected by PN junction guard ring
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



Small Signal Switching Diodes

BAV21WS – Fast Switching Diode for General Purpose

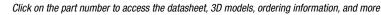
Silicon epitaxial planar diode



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile





BODY ELECTRONICS COMFORT, DOOR, WINDOW CONTROLS





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 x 4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- · ESD and surge rated
- Symmetrical leads are wave and reflow solderable



BODY ELECTRONICS INFOTAINMENT, NAVIGATION, AUDIO





Schottky Rectifiers

V40D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A × 2, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

VSSAF5M10HM3 – High Current Density, High Voltage Schottky Rectifiers

- 5 A, 100 V Schottky Rectifiers for freewheeling and rectification
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- Metal on silicon Schottky diode protected by PN junction guard ring
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

BAV21WS – Fast Switching Diode for General Purpose

• Silicon epitaxial planar diode



BODY ELECTRONICS INFOTAINMENT, NAVIGATION, AUDIO





Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching , 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



AUTOMOTIVE

Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 x 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

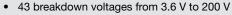
BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

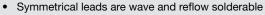
- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification







Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



BODY ELECTRONICS INTERIOR LED LIGHTING





Schottky Rectifiers

VSSAF5M6HM3 – High Current Density, High Voltage TMBS® Rectifier

- 5 A, 60 V Schottky rectifiers, high temperature, low leakage, high current density
- SlimSMA (DO-221AC) package with low profile of 0.95 mm and compatible pad layout to SMA (DO-220AC)



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode



- 2×4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

TPSMA Series – Surface-Mount PAR® Transient Voltage Suppressor With Wide Operating Temperature Range



- 400 W peak pulse power capability with a 10/1000 µs waveform, repetitive rate (duty cycle) of 0.01 % up to 43 V breakdown voltage
- SMA (DO-214AC) package



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Timax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



TVS

TPSMB Series – Surface-Mount PAR® Transient Voltage Suppressor With Wide Operating Temperature Range



- 600 W peak pulse power capability with a 10/1000 µs waveform, repetitive rate (duty cycle) of 0.01 %; up to 43 V breakdown voltage
- SMB (DO-214AA) package



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- · Metal on silicon Schottky diode protected by PN junction guard ring bullet
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching , 25 ns recovery, Timax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Small Signal Switching Diodes

BAV21WS – Fast Switching Diode for General Purpose

• Silicon epitaxial planar diode



BODY ELECTRONICS INTERIOR LED LIGHTING









BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



AUTOMOTIVE

Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable





Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- · Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



ACTIVE SAFETY

ENHANCED ELECTRICAL BRAKING (EEB)
ELECTRONIC STABILITY PROGRAM (ESP)
VEHICLE STABILITY CONTROL (VSC)
ELECTRICAL PARKING BRAKE (EPB)
INTEGRATED PARKING BRAKE (IPB)
ADVANCED DRIVER ASSISTANCE SYSTEM (ADAS)



ACTIVE SAFETY ENHANCED ELECTRICAL BRAKING (EEB)





Schottky Rectifiers

V20DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A, 120 V for freewheeling and high frequency rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V40D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A × 2, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) miniature package with 1.8 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2 × 3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode

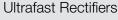




ACTIVE SAFETY ENHANCED ELECTRICAL BRAKING (EEB)







VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- · ESD and surge rated
- Symmetrical leads are wave and reflow solderable



ACTIVE SAFETY **ELECTRONIC STABILITY PROGRAM (ESP)**





Schottky Rectifiers

V40D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A × 2, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V60D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 30 A \times 2, 100 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode



ACTIVE SAFETY **ELECTRONIC STABILITY PROGRAM (ESP)**





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile llet



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



AUTOMOTIVE

Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



ACTIVE SAFETY VEHICLE STABILITY CONTROL (VSC)





Schottky Rectifiers

V20DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A, 120 V for freewheeling and high frequency rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power TVS for Main Load Dump Suppression

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V40D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A × 2, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power TVS for Main Load Dump Suppression

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power TVS for Main Load Dump Suppression for Rail to Rail Signal Line Protection

- 8000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Timax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT54 – Single and Dual Construction Protect Against Excessive Voltage

- Very low turn-on voltage and fast switching
- PN junction guard ring protects against excessive voltage, such as electrostatic discharges



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

BAV23C – Fast Switching Dual Diode with Common Cathode

• Silicon epitaxial planar diode



ACTIVE SAFETY VEHICLE STABILITY CONTROL (VSC)





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



AUTOMOTIVE

Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, T_jmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



AUTOMOTIVE

Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



ACTIVE SAFETY **ELECTRICAL PARKING BRAKE (EPB)**





Schottky Rectifiers

V35PWM10HM3 – High Current Density, High Voltage Schottky Rectifiers

- 35 A, 100 V Schottky rectifiers for freewheeling and rectification
- SlimDPAK (TO-252AE) package with 1.3 mm low profile; 120 V and 150 V types available



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V40D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 20 A × 2, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- · High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT54 – Single and Dual Construction Protect Against Excessive Voltage

- Very low turn-on voltage and fast switching
- PN junction guard ring protects against excessive voltage, such as electrostatic discharges



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

BAV23C – Fast Switching Dual Diode With Common Cathode

· Silicon epitaxial planar diode



ACTIVE SAFETY **ELECTRICAL PARKING BRAKE (EPB)**





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, T_jmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

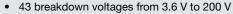
BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification



• Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



ACTIVE SAFETY INTEGRATED PARKING BRAKE (IPB)





Schottky Rectifiers

V35DM120HM3 – High Current Density, High Voltage Schottky Rectifiers

- 35 A, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

V60D100CHM3 – High Current Density, High Voltage Schottky Rectifiers

- 30 A \times 2, 120 V Schottky rectifiers for freewheeling and rectification
- SMPD (TO-263AC) package with 1.8 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT54 – Single and Dual Construction Protect Against Excessive Voltage

- Very low turn-on voltage and fast switching
- PN junction guard ring protects against excessive voltage, such as electrostatic discharges



Small Signal Switching Diodes

BAV23C – Fast Switching Dual Diode with Common Cathode

Silicon epitaxial planar diode



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile





ACTIVE SAFETY INTEGRATED PARKING BRAKE (IPB)





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



AUTOMOTIVE

Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- · Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



ACTIVE SAFETY ADVANCED DRIVER ASSISTANCE SYSTEM (ADAS)





Schottky Rectifiers

V20PWM10HM3 – High Current Density, High Voltage TMBS® Rectifier

- 20 A, 100 V low leakage Schottky rectifiers for freewheeling and rectification
- SlimDPAK (TO-252AE) package with low profile of 1.3 mm



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

VSSAF5M10HM3 – High Current Density, High Voltage Schottky Rectifiers

- 5 A, 100 V Schottky rectifiers for freewheeling and rectification
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode



ACTIVE SAFETY ADVANCED DRIVER ASSISTANCE SYSTEM (ADAS)





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- · Halogen free
- · Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



PASSIVE SAFETY

AIRBAG CONTROL SYSTEMS RESTRAINT SYSTEM POWER SUPPLIES PEDESTRIAN PROTECTION SYSTEMS



PASSIVE SAFETY AIRBAG CONTROL SYSTEMS





Schottky Rectifiers

V20PWM10HM3 – High Current Density, High Voltage TMBS® Rectifier

- 20 A, 100 V low leakage Schottky rectifiers for freewheeling and rectification
- SlimDPAK (TO-252AE) package with low profile of 1.3 mm



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

VSSAF5M6HM3 – High Current Density, High Voltage TMBS® Rectifier

- 5 A, 60 V Schottky rectifiers, high temperature, low leakage, high current density
- SlimSMA (DO-221AC) package with low profile of 0.95 mm and compatible pad layout to SMA (DO-220AC)



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- · Metal on silicon Schottky diode protected by PN junction guard ring
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

BAV21WS – Fast Switching Diode for General Purpose

· Silicon epitaxial planar diode



PASSIVE SAFETY AIRBAG CONTROL SYSTEMS





Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode



- 2 × 3 A, 200 V for high frequency switching , 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode



- 2×4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification



- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



AUTOMOTIVE

Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- · Halogen free
- Symmetrical leads are wave and reflow solderable

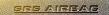


Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



PASSIVE SAFETY RESTRAINT SYSTEM POWER SUPPLIES





Schottky Rectifiers

V20PWM10HM3 – High Current Density, High Voltage TMBS® Rectifier

- 20 A, 100 V low leakage Schottky rectifiers for freewheeling and rectification
- SlimDPAK (TO-252AE) package with low profile of 1.3 mm



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

VSSAF5M6HM3 – High Current Density, High Voltage TMBS® Rectifier

- 5 A, 60 V Schottky rectifiers, high temperature, low leakage, high current density
- SlimSMA (DO-221AC) package with low profile of 0.95 mm and compatible pad layout to SMA (DO-220AC)



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- · High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode



PASSIVE SAFETY RESTRAINT SYSTEM POWER SUPPLIES





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification



- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- · Halogen free
- · Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



PASSIVE SAFETY PEDESTRIAN PROTECTION SYSTEMS





Schottky Rectifiers

V20PWM10HM3 – High Current Density, High Voltage TMBS® Rectifier

- 20 A, 100 V low leakage Schottky rectifiers for freewheeling and rectification
- SlimDPAK (TO-252AE) package with low profile of 1.3 mm



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Schottky Rectifiers

VSSAF5M6HM3 – High Current Density, High Voltage TMBS® Rectifier

- 5 A, 60 V Schottky rectifiers, high temperature, low leakage, high current density
- SlimSMA (DO-221AC) package with low profile of 0.95 mm and compatible pad layout to SMA (DO-220AC)



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- · High clamping power capability for load dump protection and freewheeling



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-1EFH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 100 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (DO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- Metal on silicon Schottky diode protected by PN junction guard ring
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



Ultrafast Rectifiers

VS-2EJH01HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 100 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

BAV21WS – Fast Switching Diode for General Purpose

• Silicon epitaxial planar diode



PASSIVE SAFETY PEDESTRIAN PROTECTION SYSTEMS





Ultrafast Rectifiers

VS-6CSH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×3 A, 100 V for high frequency switching, 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Ultrafast Rectifiers

VS-8CVH01HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×4 A, 100 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- · Halogen free
- · Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



EXTERIOR LIGHTING

LED HEADLIGHT UNITS
DAY LIGHTING
LED FOG LIGHTING
REAR AND SIGNAL LED LIGHTS



EXTERIOR LIGHTING LED HEADLIGHT UNITS





Schottky Rectifiers

V8PAM12HM3 – High Current Density, High Voltage Schottky Rectifiers

- 8 A, 120 V for freewheeling and high frequency rectification
- SMPA (DO-221BC) package with low profile of 0.95 mm



Ultrafast Rectifiers

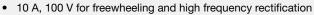
VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching , 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Schottky Rectifiers

V10P10HM3 – High Current Density, High Voltage TMBS® Rectifier







Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode



- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



AUTOMOTIVE

Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

TPSMA Series – Surface-Mount PAR® Transient Voltage Suppressor With Wide Operating Temperature Range



- 400 W peak pulse power capability with a 10/1000 µs waveform, repetitive rate (duty cycle) of 0.01 %; up to 43 V breakdown voltage
- SMA (DO-214AC) package



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- Metal on silicon Schottky diode protected by PN junction guard ring bullet
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

BAV21WS – Fast Switching Diode for General Purpose

• Silicon epitaxial planar diode



EXTERIOR LIGHTING LED HEADLIGHT UNITS





Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



AUTOMOTIVE

Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



AUTOMOTIVE

Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



EXTERIOR LIGHTING DAY LIGHTING





Schottky Rectifiers

V8PAM12HM3 – High Current Density, High Voltage Schottky Rectifiers

- 8 A, 120 V for freewheeling and high frequency rectification
- SMPA (DO-221BC) package with low profile of 0.95 mm



Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×3 A, 200 V for high frequency switching , 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Schottky Rectifiers

VSSAF5M6HM3 – High Current Density, High Voltage TMBS® Rectifier

- 5 A, 60 V Schottky rectifiers, high temperature, low leakage, high current density
- SlimSMA (DO-221AC) package with low profile of 0.95 mm and compatible pad layout to SMA (DO-220AC)



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode



- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



AUTOMOTIVE

Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

TPSMA Series – Surface-Mount PAR® Transient Voltage Suppressor With Wide Operating Temperature Range



- 400 W peak pulse power capability with a 10/1000 µs waveform, repetitive rate (duty cycle) of 0.01 %; up to 43 V breakdown voltage
- SMA (DO-214AC) package



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Timax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode



EXTERIOR LIGHTING DAY LIGHTING





Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



EXTERIOR LIGHTING LED FOG LIGHTING





Schottky Rectifiers

V8PAM12HM3 – High Current Density, High Voltage Schottky Rectifiers

- 8 A, 120 V for freewheeling and high frequency rectification
- SMPA (DO-221BC) package with low profile of 0.95 mm



Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×3 A, 200 V for high frequency switching , 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Schottky Rectifiers

VSSAF5M6HM3 – High Current Density, High Voltage TMBS® Rectifier

- 5 A, 60 V Schottky rectifiers, high temperature, low leakage, high current density
- SlimSMA (DO-221AC) package with low profile of 0.95 mm and compatible pad layout to SMA (DO-220AC)



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 x 4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

TPSMA Series – Surface-Mount PAR® Transient Voltage Suppressor With Wide Operating Temperature Range



- 400 W peak pulse power capability with a 10/1000 µs waveform, repetitive rate (duty cycle) of 0.01 %; up to 43 V breakdown voltage
- SMA (DO-214AC) package



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

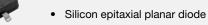
BAT54 – Single and Dual Construction Protect Against Excessive Voltage

- Very low turn-on voltage and fast switching
- PN junction guard ring protects against excessive voltage, such as electrostatic discharges



Small Signal Switching Diodes

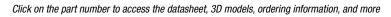
BAV23C – Fast Switching Dual Diode With Common Cathode





VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile





EXTERIOR LIGHTING LED FOG LIGHTING





Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



AUTOMOTIVE

Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



EXTERIOR LIGHTING REAR AND SIGNAL LED LIGHTS





Schottky Rectifiers

V8PAM12HM3 – High Current Density, High Voltage Schottky Rectifiers

- 8 A, 120 V for freewheeling and high frequency rectification
- SMPA (DO-221BC) package with low profile of 0.95 mm



Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching , 25 ns recovery, Tjmax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Schottky Rectifiers

VSSAF5M6HM3 – High Current Density, High Voltage TMBS® Rectifier

- 5 A, 60 V Schottky rectifiers, high temperature, low leakage, high current density
- SlimSMA (DO-221AC) package with low profile of 0.95 mm and compatible pad layout to SMA (DO-220AC)



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode



- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



TVS

TPSMA Series – Surface-Mount PAR® Transient Voltage Suppressor With Wide Operating Temperature Range



- 400 W peak pulse power capability with a 10/1000 µs waveform, repetitive rate (duty cycle) of 0.01 %; up to 43 V breakdown voltage
- SMA (DO-214AC) package



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

TPSMB Series – Surface-Mount PAR® Transient Voltage Suppressor With Wide Operating Temperature Range



- 600 W peak pulse power capability with a 10/1000 µs waveform, repetitive rate (duty cycle) of 0.01 % up to 43 V breakdown voltage
- SMB (DO-214AA) package



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Small Signal Schottky Diodes

BAT54 – Single and Dual Construction Protect Against Excessive Voltage

- · Very low turn-on voltage and fast switching
- PN junction guard ring protects against excessive voltage, such as electrostatic discharges



Small Signal Switching Diodes

BAV23C – Fast Switching Dual Diode With Common Cathode

• Silicon epitaxial planar diode



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



EXTERIOR LIGHTING REAR AND SIGNAL LED LIGHTS





Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



AUTOMOTIVE

Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



48 VDC BOARDNET

INTEGRATED STARTER GENERATORS (48 VDC) DC/DC CONVERTERS, BIDIRECTIONAL (48 VDC) HVAC (E-COMPRESSOR FOR 48 VDC)



48 VDC BOARDNET **INTEGRATED STARTER GENERATORS (48 VDC)**





Standard Rectifiers

MSE1P Series - Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- · High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Zener Diodes

BZD27B Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-1EFH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, T_imax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



Zener Diodes

BZD27B-M Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-2EJH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, T_imax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



Zener Diodes

BZD27C Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-6CSH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 x 3 A, 200 V for high frequency switching, 25 ns recovery, Timax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Zener Diodes

BZD27C-M Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
 - Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-8CVH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, T_imax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Small Signal Schottky Diodes

BAT46W - Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- · Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



Ultrafast Rectifiers

VS-16CDH02HM3 - High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

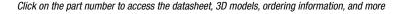
- 2 x 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Small Signal Switching Diodes

1N4448W - Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Silicon epitaxial planar diode
- · Fast switching diode





48 VDC BOARDNET INTEGRATED STARTER GENERATORS (48 VDC)





Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



48 VDC BOARDNET **DC/DC CONVERTERS, BIDIRECTIONAL (48 VDC)**





Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2×8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



TVS

P6SMB Series – Surface-Mount TransZorb® Transient Voltage Suppressor

- 600 W uni- and bidirectional TVS with up to 540 V breakdown voltage, AEC-Q101 qualified
- SMB (DO-214AA) package



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Timax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile



7ener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching, 25 ns recovery, Timax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt[®] Ultrafast Diode

- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile

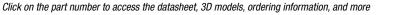


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Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Silicon epitaxial planar diode
- · Fast switching diode





48 VDC BOARDNET DC/DC CONVERTERS, BIDIRECTIONAL (48 VDC)





AUTOMOTIVE



BZD27C-M Series - Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Small Signal Schottky Diodes

BAT46W - Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



Zener Diodes

PLZ Series - 500 mW Zener Diodes in Low Profile MicroSMF (DO-219AC) Package Provide Voltage Stabilization

- 500 mW power dissipation, excellent thermal characteristics, R_{thJA} 130 k/W
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable





48 VDC BOARDNET **HVAC (E-COMPRESSOR FOR 48 VDC)**





Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Ultrafast Rectifiers

VS-16CDH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 8 A, 200 V for high frequency switching, 27 ns recovery, Tjmax = 175 °C
- SMPD (TO-263AC) package with 1.3 mm low profile



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



TVS

SM5S10AT thru SM5S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 5000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Ultrafast Rectifiers

VS-1EFH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 1 A, 200 V for high frequency switching, 17 ns recovery, Tjmax = 175 °C
- SMF (TO-219AB) package with < 1 mm low profile



TVS

SM6S10AT thru SM6S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 6000 W clamping power rating for ISO16750-2:2012 Pulse a
- High clamping power capability for load dump protection and freewheeling



Ultrafast Rectifiers

VS-2EJH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 3 A, 200 V for high frequency switching, 20 ns recovery, Tjmax = 175 °C
- SlimSMA (DO-221AC) package with 1 mm low profile





SM8S10AT thru SM8S43AT – High Power Density Uni-Directional TVS for Power Line Load Dump

- 8000 W clamping power rating for ISO16750-2: 2012 Pulse a
- · High clamping power capability for load dump protection and freewheeling



Ultrafast Rectifiers

VS-6CSH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 3 A, 200 V for high frequency switching , 25 ns recovery, Timax = 175 °C
- SMPC (TO-277A) package with 1.1 mm low profile



TVS

SMC3K Series – High Power Density Bidirectional TVS for Power Line Protection

- 3000 W clamping power rating for ISO16750-2:2012 Pulse b
- Designed for the protection of centralized load dump suppression powertrains



Ultrafast Rectifiers

VS-8CVH02HM3 – High Current Density, Soft Recovery, FRED Pt® Ultrafast Diode

- 2 × 4 A, 200 V for high frequency switching, 22 ns recovery, Tjmax = 175 °C
- SlimDPAK (TO-252AE) package with 1.3 mm low profile



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



48 VDC BOARDNET **HVAC (E-COMPRESSOR FOR 48 VDC)**







BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

PLZ Series – 500 mW Zener Diodes in Low Profile MicroSMF (DO-219AC) Package Provide Voltage Stabilization

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode



FULL HYBRID VEHICLES (HEVS)

ELECTRICAL MOTOR DRIVES (DC/AC)



FULL HYBRID VEHICLES (HEVs) **ELECTRICAL MOTOR DRIVES (DC/AC)**





Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- · High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Ultrafast Rectifiers

VS-ETH3007THN3 – High Current Density FRED Pt® Ultrafast Rectifiers in Through-Hole TO-220AC 2 Pin Package

- 30 A, 650 V, low Q_{rr} for high efficiency OBC
- Soft recovery, Tj max = 175 °C, AEC-Q101 qualified



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- · High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



Ultrafast Rectifiers

VS-ETU3006SHM3 – High Current Density FRED Pt[®] Ultrafast Rectifiers

- 30 A, 600 V, low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



Ultrafast Rectifiers

VS-16EDU06HM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 16 A, 600 V with low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, SMPD (TO-263AC) package with 1.3 mm low profile, AEC-Q101 qualified



Ultrafast Rectifiers

VS-ETX3007THN3 – High Current Density FRED Pt[®] Ultrafast Rectifiers in Through-Hole TO-220AC 2 Pin Package

- 30 A, 600 V, lowest Q_{rr} for high frequency OBC
- Soft recovery, Tj max = 175 °C, AEC-Q101 qualified



Ultrafast Rectifiers

VS-30CDU06HM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 30 A, 600 V, low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, SMPD (TO-263AC) package with 1.3 mm low profile, AEC-Q101 qualified



TVS

1.5SMC Series – Surface-Mount TransZorb® Transient Voltage Suppressor

- Up to 540 V breakdown voltage, available in uni-directional or bidirectional, high voltage TVS
- SMC (DO-214AB) package, AEC-Q101 qualified



Ultrafast Rectifiers

VS-ETH1506SHM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 15 A, 600 V with low Q_{rr} for high frequency OBC
- Soft recovery, Tjmax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



TVS

P6SMB Series – Surface-Mount TransZorb® Transient Voltage Suppressor

- 600 W uni- and bidirectional TVS with up to 540 V breakdown voltage, AEC-Q101 qualified
- SMB (DO-214AA) package



Ultrafast Rectifiers

VS-ETH3006SHM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 30 A, 600 V, low Qrr for high frequency OBC
- Soft recovery, Tjmax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



7ener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



FULL HYBRID VEHICLES (HEVs) **ELECTRICAL MOTOR DRIVES (DC/AC)**





Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

PLZ Series – 500 mW Zener Diodes in Low Profile MicroSMF (DO-219AC) Package Provide Voltage Stabilization

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges



AUTOMOTIVE

7ener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- · Fast switching diode



FULL ELECTRIC VEHICLES (FEVS)

ELECTRICAL MOTOR DRIVES (DC/AC) BATTERY MANAGEMENT AND DC/DC ON-BOARD CHARGERS



FULL ELECTRIC VEHICLES (FEVs) ELECTRICAL MOTOR DRIVES (DC/AC)





Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- · High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Ultrafast Rectifiers

VS-ETH3007THN3 – High Current Density FRED Pt® Ultrafast Rectifiers in Through-Hole TO-220AC 2-Pin Package

- 30 A, 650 V, low Q_{rr} for high efficiency OBC
- Soft recovery, Tj max = 175 °C, AEC-Q101 qualified



Standard Rectifiers

SE30AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- · High ESD voltage, current density, and surge current capability
- Low profile of 0.95 mm, compatible with SMA (DO-220AC) pad layout



Ultrafast Rectifiers

VS-ETU3006SHM3 – High Current Density FRED Pt[®] Ultrafast Rectifiers

- 30 A, 600 V, low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



Ultrafast Rectifiers

VS-16EDU06HM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 16 A, 600 V with low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, SMPD (TO-263AC) package with 1.3 mm low profile, AEC-Q101 qualified



Ultrafast Rectifiers

VS-ETX3007THN3 – High Current Density FRED Pt® Ultrafast Rectifiers in Through-Hole TO-220AC 2-Pin Package

- 30 A, 600 V, lowest Q_{rr} for high frequency OBC
- Soft recovery, Tj max = 175 °C, AEC-Q101 qualified



Ultrafast Rectifiers

VS-30CDU06HM3 – High Current Density FRED Pt®
Ultrafast Rectifiers

- 30 A, 600 V, low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, SMPD (TO-263AC) package with 1.3 mm low profile, AEC-Q101 qualified



TVS

1.5SMC Series – Surface-Mount TransZorb® Transient Voltage Suppressor

- Up to 540 V breakdown voltage, available in uni-directional or bidirectional, high voltage TVS
- SMC (DO-214AB) package, AEC-Q101 qualified



Ultrafast Rectifiers

VS-ETH1506SHM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 15 A, 600 V with low Q_{rr} for high frequency OBC
- Soft recovery, Tjmax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



TVS

P6SMB Series – Surface-Mount TransZorb® Transient Voltage Suppressor

- 600 W uni- and bidirectional TVS with up to 540 V breakdown voltage, AEC-Q101 qualified
- SMB (DO-214AA) package



Ultrafast Rectifiers

VS-ETH3006SHM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 30 A, 600 V, low Qrr for high frequency OBC
- Soft recovery, Tjmax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



7ener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



FULL ELECTRIC VEHICLES (FEVs) ELECTRICAL MOTOR DRIVES (DC/AC)







BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Zener Diodes

PLZ Series – 500 mW Zener Diodes in Low Profile MicroSMF (DO-219AC) Package Provide Voltage Stabilization

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Small Signal Schottky Diodes

BAT46W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- · Very low turn-on voltage and fast switching
- Protected by a PN junction guard ring against excessive voltage such as electrostatic discharges



AUTOMOTIVE

Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Small Signal Switching Diodes

1N4448W – Small Signal Schottky and Switching Diodes in SOD-123 Package

- Silicon epitaxial planar diode
- Fast switching diode



FULL ELECTRIC VEHICLES (FEVs) BATTERY MANAGEMENT AND DC/DC





Standard Rectifiers

MSE1P Series – Miniature-Package Rectifiers With High ESD Capability for Rail to Rail Signal Line Protection

- High ESD voltage, current density, and surge current capability
- MicroSMP (DO-219AD) package with 0.65 mm low profile saves space



Ultrafast Rectifiers

VS-ETH3007THN3 – High Current Density FRED Pt® Ultrafast Rectifiers in Through-Hole TO-220AC 2-Pin Package

- 30 A, 650 V, low Q_{rr} for high efficiency OBC
- Soft recovery, Tj max = 175 °C, AEC-Q101 qualified



Standard Rectifiers

SE20AF Series – High Current Density Rectifiers With High ESD Capability for Power Line Protection

- · High ESD voltage, current density, and surge current capability
- Compatible pad layout to SMA (DO-220AC) with low profile of 0.95 mm



Ultrafast Rectifiers

VS-ETU3006SHM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 30 A, 600 V, low VF for high efficiency OBC
 - Soft recovery, Tjmax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



Ultrafast Rectifiers

VS-16EDU06HM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 16 A, 600 V with low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, SMPD (TO-263AC) package with 1.3 mm low profile, AEC-Q101 qualified



Ultrafast Rectifiers

VS-ETX3007THN3 – High Current Density FRED Pt® Ultrafast Rectifiers in Through-Hole TO-220AC 2-Pin Package

- 30 A, 600 V, lowest Q_{rr} for high frequency OBC
- Soft recovery, Tj max = 175 °C, AEC-Q101 qualified



Ultrafast Rectifiers

VS-30CDU06HM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 30 A, 600 V, low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, SMPD (TO-263AC) package with 1.3 mm low profile, AEC-Q101 qualified



TVS

TA6F Series – Surface-Mount PAR® Transient Voltage Suppressor for High Temperature Stability and High Reliability Conditions

- T_J = 185 °C, suitable for high reliability conditions and automotive applications
- SlimSMA (DO-221AC) package with 0.95 mm low profile, compatible pad layout to SMA (DO-220AC)



AUTOMOTIVE

Ultrafast Rectifiers

VS-ETH1506SHM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 15 A, 600 V with low Q_{rr} for high frequency OBC
- Soft recovery, Tjmax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



Zener Diodes

BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-ETH3006SHM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 30 A. 600 V. low Qrr for high frequency OBC
- Soft recovery, Timax = 175 °C, D²PAK (TO-263AB) package, AEC-Q101 qualified



Zener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable





FULL ELECTRIC VEHICLES (FEVs) BATTERY MANAGEMENT AND DC/DC





AUTOMOTIVE



BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- Metal on silicon Schottky diode protected by PN junction guard ring bullet
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
- Symmetrical leads are wave and reflow solderable



Small Signal Switching Diodes

BAV21WS - Fast Switching Diode for General Purpose

• Silicon epitaxial planar diode



Zener Diodes

- Very tight Zener voltage tolerances of ± 2.5 %
- ESD and surge rated
- Symmetrical leads are wave and reflow solderable



FULL ELECTRIC VEHICLES (FEVs) ON-BOARD CHARGERS





Ultrafast Rectifiers

VS-30CDU06HM3 – High Current Density FRED Pt® Ultrafast Rectifiers

- 30 A, 600 V, low VF for high efficiency OBC
- Soft recovery, Tjmax = 175 °C, SMPD (TO-263AC) package with 1.3 mm low profile, AEC-Q101 qualified



Zener Diodes

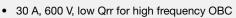
BZD27B Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

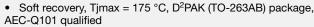
- 43 breakdown voltages from 3.6 V to 200 V
- 2 % Zener voltage tolerance
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-ETH3006SHM3 – High Current Density FRED Pt® Ultrafast Rectifiers







7ener Diodes

BZD27B-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free, 2 % tolerance
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-ETH3007THN3 – High Current Density FRED Pt® Ultrafast Rectifiers in Through-Hole TO-220AC 2-Pin Package

- 30 A, 650 V, low Q_{rr} for high efficiency OBC
- Soft recovery, Tj max = 175 °C, AEC-Q101 qualified



Zener Diodes

BZD27C Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification



- 43 breakdown voltages from 3.6 V to 200 V
- Symmetrical leads are wave and reflow solderable



Ultrafast Rectifiers

VS-ETX3007THN3 – High Current Density FRED Pt® Ultrafast Rectifiers in Through-Hole TO-220AC 2-Pin Package

- 30 A, 600 V, lowest Q_{rr} for high frequency OBC
- Soft recovery, Tj max = 175 °C, AEC-Q101 qualified



Zener Diodes

BZD27C-M Series – Zener Diodes in Low Profile SMF (DO-219AB) Package With Surge Current Specification

- 43 breakdown voltages from 3.6 V to 200 V
- Halogen free
 - Symmetrical leads are wave and reflow solderable



TVS

1.5SMC Series – Surface-Mount TransZorb® Transient Voltage Suppressor

- Up to 540 V breakdown voltage, available in uni-directional or bidirectional, high voltage TVS
- SMC (DO-214AB) package, AEC-Q101 qualified



Zener Diodes

PLZ Series – 500 mW Zener Diodes in Low Profile MicroSMF (DO-219AC) Package Provide Voltage Stabilization

- Very tight Zener voltage tolerances of ± 2.5 %
- · ESD and surge rated
- Symmetrical leads are wave and reflow solderable



TVS

P6SMB Series – Surface-Mount TransZorb® Transient Voltage Suppressor

- 600 W uni- and bidirectional TVS with up to 540 V breakdown voltage, AEC-Q101 qualified
- SMB (DO-214AA) package



Small Signal Schottky Diodes

SD103AWS – Ideal for Fast Switching and Low Logic Level Applications

- Metal on silicon Schottky diode protected by PN junction guard ring bullet
- Low forward voltage drop and fast switching ideal for protection of MOS devices, steering, biasing, and coupling diodes





FULL ELECTRIC VEHICLES (FEVs) ON-BOARD CHARGERS





Small Signal Switching Diodes

BAV21WS - Fast Switching Diode for General Purpose

• Silicon epitaxial planar diode



NETWORKS

CAN BUS, LIN BUS, FLEX BUS



NETWORKS CAN BUS, LIN BUS, FLEX BUS





ESD Protection

GSOTxx-Series – 1-Line Uni-Directional Protection Diode in SOT23 Package

- Working range from 3 V up to 36 V; ± 30 kV contact discharge; ± 30 kV air discharge
- Very common SOT23 package



ESD Protection

GSOTxxC-Series - 2-Line Uni-Directional Protection Diode in SOT23 Package

- Working range from 3 V up to 36 V; ± 30 kV contact discharge; ± 30 kV
- Very common SOT23 package



ESD Protection

SMF-Series - Uni-Directional ESD Protection Diode in Low Profile SMF (DO-219AB)

- Devices offer low 1 mm profile, low noise technology, fast response times
- Symmetrical leads are wave and reflow solderable



ESD Protection

VBUS05B1-SD0 - Uni-Directional low Cap ESD Protection Diode in Tiny CLP0603 Package

- Capacitance down to 0.29 pF typical
- . CLP0603 package is one of the smallest in the industry; low profile of 0.27 mm and uses 3x less board space than 1006 case size



ESD Protection

VCAN26A2-03G - 2-Line Bidirectional Protection Diode in Small-Size SOT323 Package

- Working range of \pm 26.5 V; low leakage current IR < 0.05 μ A
- Low load capacitance CD < 13 pF
- CAN BUS related performance in smallest SOT323 package



ESD Protection

VCAN26A2-03S - 2-Line Bidirectional Protection Diode in SOT23 Package

- Working range of ± 26.5 V; low leakage current IR < 0.05 μA
- Low load capacitance CD < 13 pF
- Very common SOT23 package



ESD Protection

VCUT05E1-SD0 - Uni-Directional ESD Protection Diode in Tiny CLP0603 Package

- Working range of ± 5.5 V; low leakage current < 0.1 μA; low load capacitance CD < 14 pF
- · CLP0603 package is one of the smallest in the industry; low profile of 0.27 mm and uses 3× less board space than 1006 case size



FSD Protection

VLIN1616-02G - 1-Line Bidirectional Protection Diode in Small-Size SOD323 Package

- Working range of ± 16 V; low leakage current IR < 0.05 μA
- Low load capacitance CD < 24 pF
- LIN BUS related performance in smallest SOD323 package



ESD Protection

VLIN1626-02G – 1-Line Bidirectional Protection Diode in Small-Size SOD323 Package

- Low load capacitance of 15.5 pF typical and 18 pF maximum
- Compact SOD-323 package measures only 1.95 mm x 1.5 mm with low 0.95 mm profile



FSD Protection

VLIN26A1-03G - 1-Line Bidirectional Protection Diode in Small-Size SOT323 Package

- Working range of ± 26.5 V; low leakage current IR < 0.05 μA
- Low load capacitance CD < 13 pF
- LIN BUS related performance in smallest SOT323 package



FSD Protection

VLIN2626-02G - 1-Line Bidirectional Protection Diode in Small-Size SOD323 Package

- Working range of ± 26.5 V; low leakage current IR < 0.05 μA
- Low load capacitance CD < 16 pF
- LIN BUS related performance in smallest SOD323 package



ESD Protection

VTVS-Series - Uni-Directional ESD Protection Diode in Low Profile SMF (DO-219AB)

- Feature a 2 % breakdown voltage tolerance, low 1 mm profile, low noise technology, and fast response times
- Symmetrical leads are wave and reflow solderable





The Art of Diodes and Rectifiers





SMPD (TO-263AC)

SOLUTIONS"

www.vishay.com

croSMP (DO-219AD)

CLP1608-2L

CLP1406-2L

SMP (D0-220AA)

SlimSMA (DO-221AC)

