

# High-Efficiency 1200V Gen4 SiC Schottky Diodes for Automotive Power Systems



## 1200V GEN4 SiC SBD



### Features

- Gen4 Silicon Carbide Technology
- Zero Reverse Recovery Switching
- Low Forward Voltage Drop
- 1200 V High-Voltage Capability
- AEC-Q101 Automotive Qualified
- Wide Temperature Operation
- High Surge Current Capability



### Benefits

Gen4 JBS technology reduces switching losses and leakage current, delivering higher efficiency and stable performance even at high temperatures.

SiC Schottky design enables faster switching and improved thermal margins, increasing system reliability and power density in demanding applications.

### Applications



EV charging



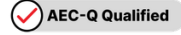
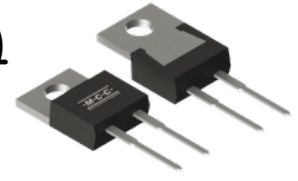
Solar inverters



Welding equipment



## AEC-Q101 Qualified Rectifiers with Zero Reverse Recovery in DPAK & TO-220AC Packages



# High-Voltage SiC Schottky Diodes with Ultra-Low Switching Loss and High Thermal Stability

## Product Attributes, Parametrics & Datasheets

Product	Type	Package	Average Forward Current $I_{F(AV)}$ (A)	Peak Repetitive Reverse Voltage $V_{RRM}$ (V)	Forward Voltage $V_F$ (V) [max] @ $I_F$ (A)	At Rated Forward Current $I_F$ (A)	Reverse Voltage Leakage Current $I_R$ ( $\mu$ A) [max] @ $V_R$	Datasheet
<a href="#">SICU10120XG4JQ</a>	<a href="#">SiC Schottky Barrier Diodes (SBDs)</a>	<a href="#">DPAK</a>	10	1200	1.55	10	20	<a href="#">Info</a>
<a href="#">SICU02120G4JQ</a>	<a href="#">SiC Schottky Barrier Diodes (SBDs)</a>	<a href="#">DPAK</a>	2	1200	1.6	2	20	<a href="#">Info</a>
<a href="#">SIC10120G4JQ</a>	<a href="#">SiC Schottky Barrier Diodes (SBDs)</a>	<a href="#">TO-220AC</a>	10	1200	1.55	10	25	<a href="#">Info</a>

## Applications



### Electric Vehicle & Charging Infrastructure

- EV charging infrastructure (on-board and off-board chargers)
- DC fast chargers
- On-board chargers (OBC)
- Auxiliary power modules
- Charging station power conversion stages

### Motor Control & Motion Systems

- Motor drives and traction systems
- Variable frequency drives (VFDs)
- Servo drives
- Industrial and automotive motor inverters
- Robotics and automated motion control systems

### Power Conversion & Power Management

- Switching power supplies (SMPS)
- Power factor correction (PFC) stages
- AC/DC and DC/DC converters
- High-frequency rectification stages
- Server and telecom power supplies

### Renewable Energy

- Solar inverters
- String and central inverters
- DC combiner boxes
- Energy storage systems (ESS)
- Battery management and conversion stages

### Industrial Power Systems

- Industrial power supplies
- Welding equipment
- Uninterruptible power supplies (UPS)
- Factory automation and control systems
- High-power industrial converters

**CONTACT MCC TO REQUEST A SAMPLE**

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