

Fourth Generation SiC Schottky Diodes: 650V / 1200V, 2A & 4A

SIC SCHOTTKY DIODES



Features

- Low forward voltage
- Ultra-low switching loss
- Positive temperature coefficient for safe paralleling
- Negligible reverse recovery
- Wide operating temperature range
- Lower heatsink requirements and higher power density
- 650 V and 1200 V voltage ratings
- 2 A and 4 A current options
- TO-220AC and ITO-220AC package options



Benefits

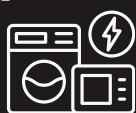
Positive temperature coefficient supports stable current sharing in parallel configurations, improving system robustness, and reducing the need for complex current balancing schemes.

Negligible reverse recovery charge reduces switching losses and EMI, enabling higher switching frequencies, smaller magnetics, and more compact, efficient power stages.

Applications



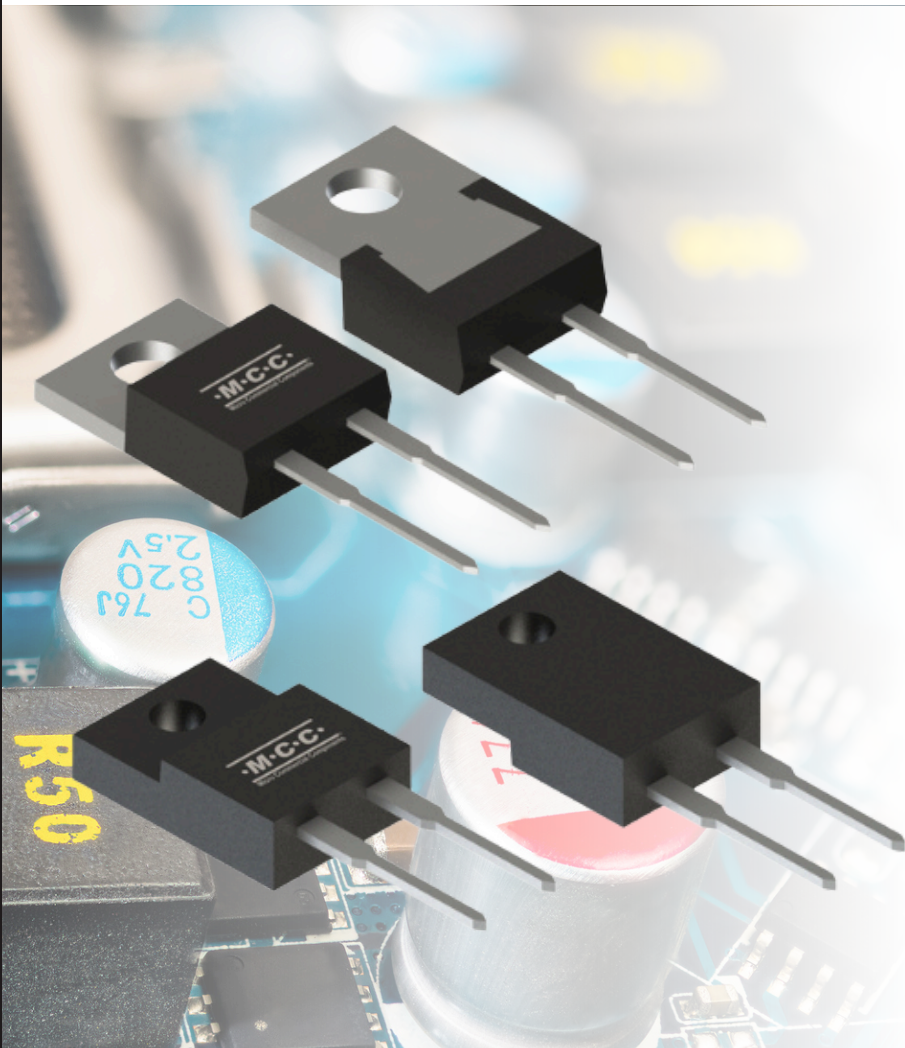
LED drivers &
industrial
lighting



Energy-
efficient
appliances

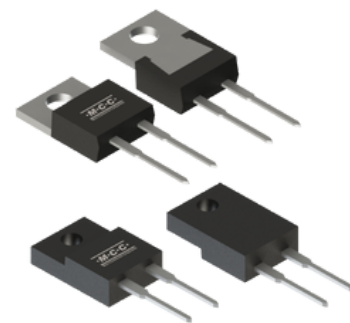


Industrial
motor
controllers



High-Efficiency Rectification with Ultra- Low Switching Losses

650 V and 1200 V SiC Schottky Diodes with Ultra Low Losses for Compact Reliable Power Systems



Product Attributes, Parametrics & Datasheets

Product	Type	Package	Average Forward Current $I_F(AV)$ (A)	Peak Repetitive Reverse Voltage V_{RRM} (V)	Mounting Type	Datasheet
<u>SICF02120Y</u>	SiC SBDs	TO-220AC	2	1200	Through Hole	<u>Info</u>
<u>SICF0465Y</u>	SiC SBDs	ITO-220AC	4	650	Through Hole	<u>Info</u>
<u>SIC0465Y</u>	SiC SBDs	ITO-220AC	4	650	Through Hole	<u>Info</u>

Applications



Power Electronics: Switching Power Supplies

- AC-DC adapters, industrial SMPS (PFC front end, output rectification)
- Server/telecom power modules for high-density designs
- Renewable energy inverters (auxiliary/control power)
- LED drivers and industrial lighting

Power Quality: PFC Stages

- Active/boost PFC in SMPS and EV chargers
- UPS and power conditioners
- Energy-efficient appliances

Transportation: Motor Drives & Traction

- EV traction inverters and auxiliary circuits
- On-board chargers, DC-DC converters
- Industrial motor controllers and robotics

CONTACT MCC TO REQUEST A SAMPLE

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