



MOSFET Schottky SiC

SiC Based Semiconductor Components

- For High Speed Applications

Features/Benefits

- › High Reverse Breakdown Voltage
- › Advanced Planar Technology
- › Low On-State Resistance
- › Fast Switching Time With Low Capacitance
- › Low Gate Charge
- › Low Total Switching Energy

Applications

- › Charging Systems for Electric Vehicles (EV)
- › Solar Inverters
- › Telecom Power Supplies
- › Power Factor Correction (PFC)
- › Switched-Mode Power Supply (SMPS)
- › On Board Charger
- › DC/DC Converters
- › Industrial Machinery
- › Motor Drive

SiC MOSFETs and SiC Schottky Diodes For High Speed Applications

Efficiency and power savings are always a concern when dealing with conventional Si MOSFETs in a high power, fast switching application. There is only one solution: SiC MOSFETs and SiC Schottky Diodes. SiC based semiconductor components are the new generation invention that surpasses its predecessor in every possible way, such as exceptionally

high breakdown voltage, improved switching speed and less susceptibility to self-destruction. The high frequency switching SiC based solution features high reverse voltage with extremely low reverse recovery, better said capacitive charging and thus discharging time.

SiC MOSFETs

Partnumber	V_{DS} [V]	I_D [A]	$R_{DS(on)}$ [m Ω]	Package
DI075SIC035TLS	750	65	< 35	TOLL-K
DI120SIC019TLS	1200	90	< 19	TOLL-K
DI120SIC040TLS	1200	55	< 40	TOLL-K
DI120SIC052QD	1200	49	< 52	QDPAK
DI120SIC052QD-AQ	1200	49	< 52	QDPAK
DI120SIC055T7	1200	55	< 55	T7-PAK
DI120SIC055T7-AQ	1200	55	< 55	T7-PAK
DIF120SIC035-AQ	1200	72	< 35	TO-247-4L



SiC Schottky Diodes

Partnumber	V_{RRM} [V]	I_{FAV} [A]	V_F [V]	Package
SI01C065T	650	1	1,2	SMAF
SI01C120SMB	1200	1	1,3	SMB
SI02C120SMA	1200	2	1,4	SMA
SI06C065D2	650	6	1,7	D2PAK
SI10C065D2/-AQ	650	10	1,55	D2PAK
SICW30C065/-AQ	650	2 x 15	1,55	TO-247-3L
SIT06C065	650	6	1,65	TO-220AC
SIT10C120	1200	10	1,8	TO-220AC



Packages

