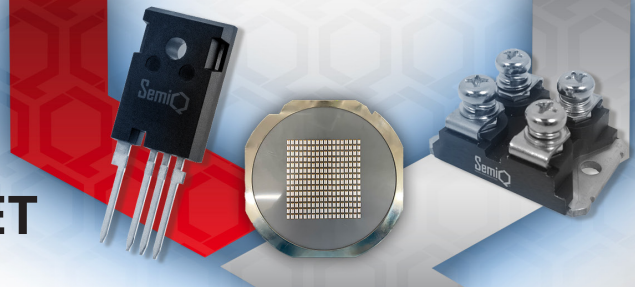


QSiC™ 1200V Third-Generation SiC MOSFET



Cutting-Edge Efficiency & Performance for High-Power Applications
Optimized for EV Charging, Renewable Power, UPS, and Motor-Drivers



Benefits of SemiQ Gen3 SiC MOSFETs



20% smaller die size vs.
previous generation



Reduced switching losses &
improved efficiency



Industry-leading
performance and reliability



Available in bare die,
TO-247-4L, TSPAK and
Module Packages



Automotive qualified

Features

- 1200 V Voltage Rating
- Low On-Resistance
- Low Switching Losses
- Reliable Body Diode
- Gate-Source Voltage (VGSmax): -8/22 V
- Low Capacitance
- Temperature Range: -55°C to 175°C
- Thermal Resistance: 0.26°C/W junction-to-case*

*Applies to GP3T016A120X/H only.

Tested for Reliability

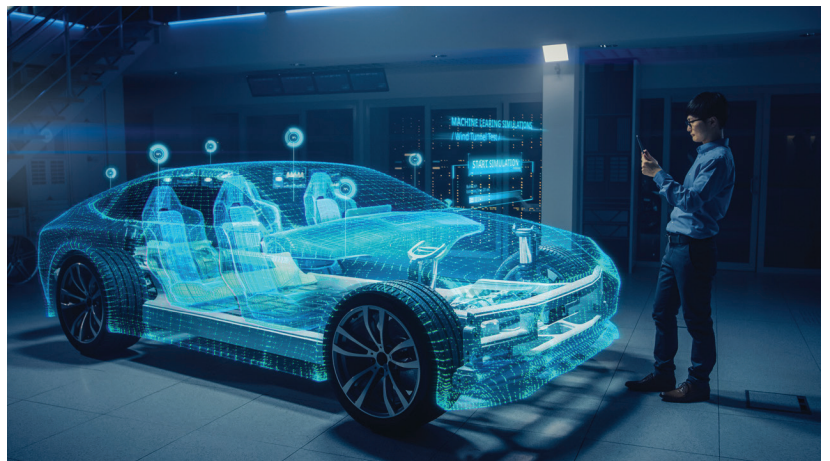
- 100% wafer-level gate oxide burn-in screening
- 100% UIL testing for discrete packaged devices
- Avalanche tested up to 800 mJ
- Tested beyond 1400 V

Available in Module, Discrete and Die Packages

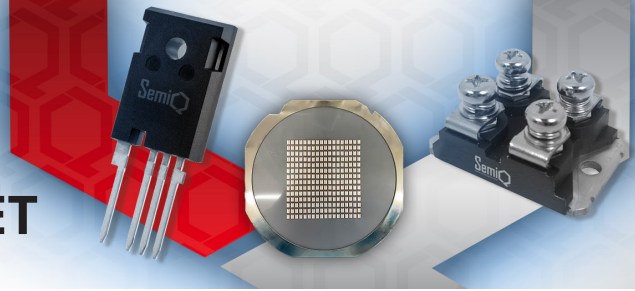
Get More Information

Visit [SemiQ.com](https://www.semiq.com) for detailed specifications,
datasheets, and sample requests.

Scan the QR code to download the datasheets
for the Gen3 MOSFETs.



QSiC™ 1200V Third-Generation SiC MOSFET



QSiC™ Gen3 SiC MOSFETs

Module Packages

Part Number	Status	V _{DC}	R _{DS(ON)}	Package
GCMX007C120S1-E1	Production	1200 V	7mΩ	SOT-227 w/o SBD
GCMX008C120S1-E1	Production	1200 V	8mΩ	SOT-227 w/o SBD
GCMX014C120S1-E1	Production	1200 V	14mΩ	SOT-227 w/o SBD
GCMX016C120S1-E1	Production	1200 V	16mΩ	SOT-227 w/o SBD
GCMX034C120S1-E1	Production	1200 V	34mΩ	SOT-227 w/o SBD
GCMX040C120S1-E1	Production	1200 V	40mΩ	SOT-227 w/o SBD
GCMX080C120S1-E1	Production	1200 V	80mΩ	SOT-227 w/o SBD
GCMS007C120S1-E1	Production	1200 V	7mΩ	SOT-227 w/SBD
GCMS008C120S1-E1	Production	1200 V	8mΩ	SOT-227 w/SBD
GCMS014C120S1-E1	Production	1200 V	14mΩ	SOT-227 w/SBD
GCMS016C120S1-E1	Production	1200 V	16mΩ	SOT-227 w/SBD
GCMS034C120S1-E1	Production	1200 V	34mΩ	SOT-227 w/SBD
GCMS040C120S1-E1	Production	1200 V	40mΩ	SOT-227 w/SBD
GCMS080C120S1-E1	Production	1200 V	80mΩ	SOT-227 w/SBD
GCMS072C120S1-E1	Coming Soon	1200 V	72mΩ	SOT-227 w/SBD
GCMX072C120S1-E1	Coming Soon	1200 V	72mΩ	SOT-227 w/o SBD
GCMX020A120B2T1P	Production	1200 V	20mΩ	Three Phase Module
GCMX040A120B2T1P	Production	1200 V	40mΩ	Three Phase Module
GCMX080A120B2T1P	Production	1200 V	80mΩ	Three Phase Module
GCMX017B120B2T1P	Coming Soon	1200 V	17mΩ	Three Phase Module

Part Number	Status	V _{DC}	R _{DS(ON)}	Package
GCMX034B120B2T1P	Coming Soon	1200 V	34mΩ	Three Phase Module
GCMX072B120B2T1P	Coming Soon	1200 V	72mΩ	Three Phase Module
GCMX007B120B3H1P	Production	1200 V	7mΩ	B3H1 Full Bridge
GCMX008B120B3H1P	Production	1200 V	8mΩ	B3H1 Full Bridge
GCMX014B120B3H1P	Production	1200 V	14mΩ	B3H1 Full Bridge
GCMX016B120B3H1P	Production	1200 V	16mΩ	B3H1 Full Bridge
GCMX007B120B3B1P	Coming Soon	1200 V	7mΩ	B3B1 Half Bridge
GCMX3P5B120B3B1P	Coming Soon	1200 V	3.5mΩ	B3B1 Half Bridge
GCMX2P3B120S3B1-N	Production	1200 V	2.3mΩ	S3B1 Half Bridge
GCMX3P5B120S3B1-N	Production	1200 V	3.5mΩ	S3B1 Half Bridge
GCMX2P3B120S7B1	Coming Soon	1200 V	2.3mΩ	S7B1 Half Bridge
GCMX3P5B120S7B1	Coming Soon	1200 V	3.5mΩ	S7B1 Half Bridge
GCMX014B120B2H2P	Coming Soon	1200 V	14mΩ	B2H2 Full Bridge
GCMX017B120B2H2P	Coming Soon	1200 V	17mΩ	B2H2 Full Bridge
GCMX034B120B2H2P	Coming Soon	1200 V	34mΩ	B2H2 Full Bridge
GCMX072B120B2H2P	Coming Soon	1200 V	72mΩ	B2H2 Full Bridge
GCMX007B120B2B1P	Coming Soon	1200 V	7mΩ	B2B1 Half Bridge
GCMX014B120B2B1P	Coming Soon	1200 V	14mΩ	B2B1 Half Bridge
GCMX034B120B2B1P	Coming Soon	1200 V	34mΩ	B2B1 Half Bridge

Discrete Packages

Part Number	Status	V _{DC}	R _{DS(ON)}	Package
GP3T080A120TS	Production	1200 V	80 mΩ	TSPAK
GP3T040A120TS	Production	1200 V	38 mΩ	TSPAK
GP3T020A120TS	Production	1200 V	18 mΩ	TSPAK
GP3T016A120TS	Production	1200 V	16 mΩ	TSPAK
GP3T034A120H	Production	1200 V	32 mΩ	TO-247-4L
GP3T017A120H	Production	1200 V	15 mΩ	TO-247-4L
GP3T014A120H	Production	1200 V	14 mΩ	TO-247-4L
GP3T080A120J	Production	1200 V	80 mΩ	TO-263-7L
GP3T040A120U	Production	1200 V	38 mΩ	TO-247-3L
GP3T080A120H	Production	1200 V	80 mΩ	TO-247-4L
GP3T040A120H	Production	1200 V	38 mΩ	TO-247-4L
GP3T020A120H	Production	1200 V	18 mΩ	TO-247-4L
GP3T016A120H	Production	1200 V	16 mΩ	TO-247-4L

Qualified for Automotive Applications

Part Number	Status	V _{DC}	R _{DS(ON)}	Package
AS3T016A120H	Production	1200 V	16 mΩ	TO-247-4L
AS3T040A120H	Production	1200 V	38 mΩ	TO-247-4L

