

## SiC Schottky MPS™

GeneSiC's new generation of SiC diodes feature the combination of excellent forward and switching characteristics with best-in-class robustness and thermal conductivity.



**G** – GeneSiC Semiconductor

**B, C, D, E** – Technology Generation (D = 4<sup>th</sup> Generation, E = 5<sup>th</sup> Generation)

**2X** – Common Cathode or Dual Diode (or Blank if Single Diode)

**30** – Forward Current (A) Rating at Rated Forward Voltage ( $V_F$ )

**MPS, SLT, SHT** – MPS = Schottky MPS™ Series / SLT, SHT = Schottky JBS

**06, 12, 17, 33** – Repetitive Peak Reverse Voltage Multiplier \* 100 (V)

**227, N** – Industry Standard Package Code

**214, S** – DO-214

**252, A** – TO-252-2 (DPAK-2)

**263, J** – TO-263-7 (D2PAK-7)

**220, A** – TO-220-2 or TO-220-ISO or TO-220-FP

**247, H, D** – TO-247-2 (H) or TO-247-3 (D) (Common Cathode)

**227, N** – SOT-227 (Dual Diode / Mini-Module)



DO-214

TO-252-2

TO-263-7

TO-220-2

TO-220-FP

TO-247-2

TO-247-3

SOT-227


### Features

- ✓ High Avalanche (UIS) Capability
- ✓ Enhanced Surge Current Capability
- ✓ Superior Figure of Merit  $Q_C/I_F$
- ✓ Low Thermal Resistance
- ✓ 175 °C Maximum Operating Temperature
- ✓ Temperature Independent Fast Switching
- ✓ Positive Temperature Coefficient of  $V_F$


### Benefits

- ✓ Superior System Ruggedness
- ✓ Improved Circuit Efficiency (Low Power Losses)
- ✓ Zero Recovery Losses
- ✓ Smaller Heat Sink Requirements
- ✓ High Temperature Operation with Low Losses
- ✓ Zero Recovery Losses
- ✓ Ease of Paralleling without Thermal Runaway





### 650 V

Current $I_F$	Chip	DO-214	TO-252-2	TO-263-7	TO-220-2	TO-247-2	TO-247-3	SOT-227
1 A		✓						
4 A			✓		✓			
6 A			✓		✓			
8 A			✓		✓			
10 A			✓		✓			
12 A					✓			
16 A							✓	
20 A							✓	
30 A	✓			✓		✓		
50 A	✓					✓		
60 A								✓
100 A								✓
200 A								✓





### 1200 V

Current $I_F$	Chip	DO-214	TO-252-2	TO-220-2	TO-247-2	TO-247-3	SOT-227
1 A		✓	✓				
2 A		✓	✓	✓			
5 A			✓				
8 A			✓	✓			
10 A			✓	✓		✓	
15 A	✓			✓	✓	✓	
20 A	✓			✓	✓	✓	
30 A	✓					✓	
40 A						✓	
50 A	✓				✓		
60 A							✓
100 A	✓						✓
200 A							✓

### 1700 V

Current $I_F$	Chip	TO-263-7	TO-247-2	SOT-227
5 A				
10 A		✓	✓	
25 A	✓		✓	
50 A			✓	
75 A	✓			
100 A				✓
150 A				✓

### 3300 V

Current $I_F$	Chip	DO-214	TO-263-7	TO-220FP
0.3 A				
5 A	✓	✓	✓	✓
50 A	✓			

## Discrete Product List

Voltage	Part Number	Package	Forward Current (I <sub>F</sub> )
650 V	<a href="#">GB01SLT06-214</a>	DO-214	1 A
	<a href="#">GE04MPS06E</a>	TO-252-2	4 A
	<a href="#">GE04MPS06A</a>	TO-220-2	4 A
	<a href="#">GE06MPS06E</a>	TO-252-2	6 A
	<a href="#">GE06MPS06A</a>	TO-220-2	6 A
	<a href="#">GE08MPS06E</a>	TO-252-2	8 A
	<a href="#">GE08MPS06A</a>	TO-220-2	8 A
	<a href="#">GE10MPS06E</a>	TO-252-2	10 A
	<a href="#">GE10MPS06A</a>	TO-220-2	10 A
	<a href="#">GE12MPS06A</a>	TO-220-2	12 A
	<a href="#">GE2X8MPS06D</a>	TO-247-3	16 A
	<a href="#">GE2X10MPS06D</a>	TO-247-3	20 A
	<a href="#">GD30MPS06J</a>	TO-263-7	30 A
	<a href="#">GD30MPS06H</a>	TO-247-2	30 A
	<a href="#">GC50MPS06-247</a>	TO-247-2	50 A
	<a href="#">GD2X30MPS06N</a>	SOT-227	60 A
	<a href="#">GC2X50MPS06-227</a>	SOT-227	100 A
	<a href="#">GC2X100MPS06-227</a>	SOT-227	200 A
1200 V	<a href="#">GB01SLT12-214</a>	DO-214	1 A
	<a href="#">GB01SLT12-252</a>	TO-252-2	1 A
	<a href="#">GB02SLT12-214</a>	DO-214	2 A
	<a href="#">GB02SLT12-252</a>	TO-252-2	2 A
	<a href="#">GC02MPS12-220</a>	TO-220-2	2 A
	<a href="#">GB05SLT12-252</a>	TO-252-2	5 A
	<a href="#">GC05MPS12-252</a>	TO-252-2	5 A
	<a href="#">GC08MPS12-252</a>	TO-252-2	8 A
	<a href="#">GC08MPS12-220</a>	TO-220-2	8 A
	<a href="#">GB10SLT12-252</a>	TO-252-2	10 A
	<a href="#">GC10MPS12-252</a>	TO-252-2	10 A
	<a href="#">GC10MPS12-220</a>	TO-220-2	10 A
	<a href="#">GC2X5MPS12-247</a>	TO-247-3	10 A
	<a href="#">GC15MPS12-220</a>	TO-220-2	15 A
	<a href="#">GC15MPS12-247</a>	TO-247-2	15 A
	<a href="#">GC2X8MPS12-247</a>	TO-247-3	15 A
	<a href="#">GC20MPS12-220</a>	TO-220-2	20 A
	<a href="#">GB20SLT12-247</a>	TO-247-2	20 A
	<a href="#">GC20MPS12-247</a>	TO-247-2	20 A
	<a href="#">GC2X10MPS12-247</a>	TO-247-3	20 A
<a href="#">GC2X15MPS12-247</a>	TO-247-3	30 A	

1200 V	<a href="#">GC2X20MPS12-247</a>	TO-247-3	40 A
	<a href="#">GB50SLT12-247</a>	TO-247-2	50 A
	<a href="#">GC50MPS12-247</a>	TO-247-2	50 A
	<a href="#">GD2X30MPS12N</a>	SOT-227	60 A
	<a href="#">GB2X50MPS12-227</a>	SOT-227	100 A
	<a href="#">GB2X100MPS12-227</a>	SOT-227	200 A
1700 V	<a href="#">GB05MPS17-247</a>	TO-247-2	5 A
	<a href="#">GB05MPS17-263</a>	TO-263-7	5 A
	<a href="#">GB10MPS17-247</a>	TO-247-2	10 A
	<a href="#">GB25MPS17-247</a>	TO-247-2	25 A
	<a href="#">GB50MPS17-247</a>	TO-247-2	50 A
	<a href="#">GB2X50MPS17-247</a>	SOT-227	100 A
	<a href="#">GD2X75MPS17N</a>	SOT-227	150 A
3300 V	<a href="#">GAP3SLT33-214</a>	DO-214	0.3 A
	<a href="#">GAP3SLT33-220FP</a>	TO-220-FP	0.3 A
	<a href="#">GB05MPS33-263</a>	TO-263-7	5 A

## Bare Chip

Part Number	Voltage ( $V_{RRM}$ )	Forward Current ( $I_F$ )
<a href="#">GC50MPS06-CAL</a>	650 V	50 A
<a href="#">GC15MPS12-CAL</a>	1200 V	15 A
<a href="#">GC20MPS12-CAL</a>		20 A
<a href="#">GC50MPS12-CAL</a>		50 A
<a href="#">GD100MPS12-CAL</a>		100 A
<a href="#">GC25MPS17-CAL</a>	1700 V	25 A
<a href="#">GD75MPS17-CAL</a>		75 A
<a href="#">GAP3SHT33-CAU</a>	3300 V	0.3 A
<a href="#">GC50MPS33-CAL</a>		50 A

## Learn More

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