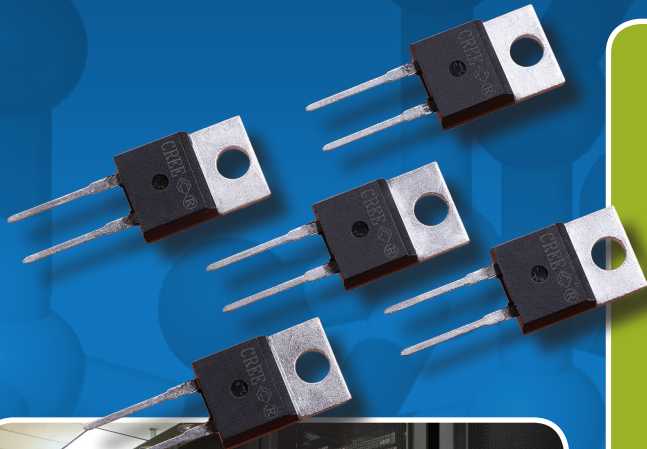
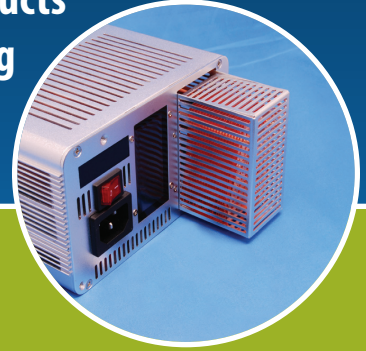


# Z-Rec™ 650 V Silicon Carbide Schottky Diode

Cree adds 650 V, 4 A, 6 A, 8 A, and 10 A Silicon Carbide Schottky diodes to its world class Z-Rec™ Schottky diode product line. The 650 V SiC Schottky products provide an efficient solution for higher AC input voltage switching mode power supply PFC applications.



## FEATURES

- Zero Reverse Recovery
  - » Independent from junction temperature
  - » Virtually eliminate diode switching losses
  - » Significantly reduce active switch turn-on losses
  - » Greatly reduce overall system losses
  - » Significantly reduce cooling requirements and improve system reliability
- Positive Temperature Coefficient Forward Voltage
  - » Ideal for parallel operation
- Higher Potential Switching Speed
  - » Reduce system volume and weight

## Key Specifications:

Part Number	Package	$I_F$ (A) @ $T_c = 150^\circ\text{C}$	$V_F$ (V) Typical	$I_{FRM}$ (A) @ $T_c = 110^\circ\text{C}$	$I_{FSM}$ (A) @ $T_c = 25^\circ\text{C}$	$Q_c$ (nC)
C3D04065A	TO-220-2	4	1.5 @ 25 °C 1.8 @ 175 °C	17	32	8.5
C3D06065A	TO-220-2	6	1.6 @ 25 °C 1.9 @ 175 °C	27	70	16
C3D08065A	TO-220-2	8	1.6 @ 25 °C 1.9 @ 175 °C	36	80	21
C3D10065A	TO-220-2	10	1.5 @ 25 °C 2.0 @ 175 °C	44	90	25

# Power Product Line

## Z-REC™ and ZERO-RECOVERY® RECTIFIERS

	Package Type	V <sub>RRM</sub> (V)	I <sub>F(AVG)</sub> (A)	V <sub>F(TJ=25°C)</sub>		V <sub>F(TJ=175°C)</sub>		T <sub>J(Max)</sub>
				Typ	Max	Typ	Max	
CSD01060A	TO-220-2	600	1	1.6	1.8	2.0	2.4	175°C
CSD01060E	DPAK	600	1	1.6	1.8	2.0	2.4	175°C

C3D02060A	TO-220-2	600	2	1.5	1.7	1.8	2.4	175°C
C3D02060E	DPAK	600	2	1.5	1.7	1.8	2.4	175°C
C3D02060F	Full-Pak	600	2	1.5	1.7	1.8	2.4	175°C
C3D03060A	TO-220-2	600	3	1.5	1.7	1.8	2.4	175°C
C3D03060E	DPAK	600	3	1.5	1.7	1.8	2.4	175°C
C3D03060F	Full-Pak	600	3	1.5	1.7	1.8	2.4	175°C
C3D04060A	TO-220-2	600	4	1.5	1.7	1.8	2.4	175°C
C3D04060E	DPAK	600	4	1.5	1.7	1.8	2.4	175°C
C3D04060F	Full-Pak	600	4	1.5	1.7	1.8	2.4	175°C
C3D06060A	TO-220-2	600	6	1.6	1.8	1.9	2.4	175°C
C3D06060G	D <sup>2</sup> PAK	600	6	1.6	1.8	1.9	2.4	175°C
C3D08060A	TO-220-2	600	8	1.6	1.8	1.9	2.4	175°C
C3D08060G	D <sup>2</sup> PAK	600	8	1.6	1.8	1.9	2.4	175°C
C3D10060A	TO-220-2	600	10	1.5	1.8	2.0	2.4	175°C
C3D10060G	D <sup>2</sup> PAK	600	10	1.5	1.8	2.0	2.4	175°C
C3D20060D	TO-247-3	600	20	1.5	1.8	2.0	2.4	175°C

C3D04065A	TO-220-2	650	4	1.5	1.7	1.8	2.4	175°C
C3D06065A	TO-220-2	650	6	1.6	1.8	1.9	2.4	175°C
C3D08065A	TO-220-2	650	8	1.6	1.8	1.9	2.4	175°C
C3D10065A	TO-220-2	650	10	1.5	1.8	2.0	2.4	175°C

C2D05120A	TO-220-2	1200	5	1.6	1.8	2.6	3.0	175°C
C2D05120E	DPAK	1200	5	1.6	1.8	2.6	3.0	175°C
C2D10120A	TO-220-2	1200	10	1.6	1.8	2.5	3.0	175°C
C2D10120D	TO-247-3	1200	10	1.6	1.8	2.6	3.0	175°C
C2D20120D	TO-247-3	1200	20	1.6	1.8	2.5	3.0	175°C

## SILICON CARBIDE Z-FET™ MOSFET

	Package Type	V <sub>DSS</sub> (V)	R <sub>DS(ON)(TJ=25°C)</sub> (mΩ)		R <sub>DS(ON)(TJ=125°C)</sub> (mΩ)		I <sub>D(TC=25°C)</sub> (A)	I <sub>D(TC=100°C)</sub> (A)
			Typ	Max	Typ	Max	(Continuous)	(Continuous)
CMF20120D	TO-247-3	1200	80	110	95	130	33	17

RoHS, REACH, and Halogen-Free compliant

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