Cree, Inc. Product Change Notification

PCN-PW070: Qualification of Expanded 150mm Wafer Manufacturing Facility for All Packaged SiC Schottky Diode Products

Change

Cree has commenced the qualification of SiC Schottky diodes manufactured on 150mm wafers at its expanded semiconductor manufacturing facility located in Durham, NC. The purpose of this PCN is to provide advanced notice to our customers of the qualification schedule, so they may develop their own qualification plan in advance.

Change Description

Cree SiC Schottky diodes are currently manufactured on 150mm diameter wafers at Cree's fabrication facility in Research Triangle Park, North Carolina, USA. The production line is being expanded to include additional manufacturing capability at Cree's fabrication facility in Durham, North Carolina, USA. This manufacturing line expansion will increase production capacity and ensure Cree's continued ability to provide diodes to our customers within our standard delivery times.

Part Description

Refer to Table 1 for a full list of discrete part numbers.

Impact of Change

For all part numbers in Table 1, the impact of the change is wafer production facility only. There is no change to form, fit, function, or reliability of the diode. It should be noted that the additional Durham manufacturing facility is a Class 100 (ISO 5) cleanroom certified to ISO9001 and IATF16949:2016 standards and has been a fully-functional Cree-owned semiconductor manufacturing facility in operation for more than 20 years.

This change impacts the wafer production line only; no changes are being made to the backend assembly processes, and therefore the diode package is not impacted. Products manufactured in the Durham facility will have identical specifications and part numbers to those manufactured in the RTP facility. Customers may continue to place orders using the same part numbers.

Note that Cree will not mix source wafer types within individual builds of packaged discrete devices. Each packaged device date code will only be sourced from either the current RTP manufacturing line or the expanded manufacturing line. Note that device shipments to distributors and customers may contain a mix of date codes, and therefore these shipments may also contain a mix of date codes sourced from the different production lines. Traceability to manufacturing line will be maintained by Cree.

Reason for Change

The reason for this change is to increase production capacity and to ensure Cree's ability to provide diodes to our customers within our standard delivery times.

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Reason for Notification

The purpose of this notification is to provide advanced notice to our customers who may need to perform their own qualification or verification, thereby enabling them to prepare for the change in advance and minimize disruption to their manufacturing lines.

If you have any concerns or questions, please notify your local sales representative.

Qualification Plan

All parts will be qualified to all tests listed in the existing 150mm qualification reports for each respective part number. All tests will be performed to parameters that meet or exceed the test parameters listed in the existing 150mm qualification report.

Qualification Schedule

The qualification of diodes manufactured in the Durham facility will commence in August 2018, with completion scheduled for October 2018. Shipment to customers of qualified Schottky diodes manufactured in the expanded facility will begin in January 2019.

First qualified parts will be available in October 2018. Engineering samples will be available beginning in August 2018.

Contact

Any questions or requests for additional information should be directed to your sales representative or by contacting Cree, Inc. directly at 919-287-7888, or via email at CreePower_sales@cree.com.

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Table 1: Cree Packaged Schottky Diode Part Numbers Included in the Production Line Expansion

CSD01060A	C3D08060A	C4D02120A
CSD01060E	C3D08060F	C4D02120E
CSD01060E-TR	C3D08060G	C4D02120E-TR
C3D02060A	C3D08060G-TR	C4D05120A
C3D02060E	C3D08065A	C4D05120E
C3D02060E-TR	C3D08065E	C4D05120E-TR
C3D02060F	C3D08065E-TR	C4D08120A
C3D02065E	C3D08065I	C4D08120E
C3D02065E-TR	C3D10060A	C4D08120E-TR
C3D03060A	C3D10060G	C4D10120A
C3D03060E	C3D10060G-TR	C4D10120D
C3D03060E-TR	C3D10065A	C4D10120E
C3D03060F	C3D10065E	C4D10120E-TR
C3D03065E	C3D10065E-TR	C4D10120H
C3D04060A	C3D10065I	C4D15120A
C3D04060E	C3D10170H	C4D15120D
C3D04060E-TR	C3D12065A	C4D15120H
C3D04060F	C3D16060D	C4D20120A
C3D04065A	C3D16065A	C4D20120D
C3D04065E	C3D16065D	C4D20120H
C3D06060A	C3D1P7060Q	C4D30120D
C3D06060F	C3D20060D	C4D40120D
C3D06060G	C3D20065D	C5D50065D
C3D06060G-TR	C3D25170H	CVFD20065A
C3D06065A	C3D30065D	E4D20120A
C3D06065E		
C3D06065E-TR		
C3D06065I		