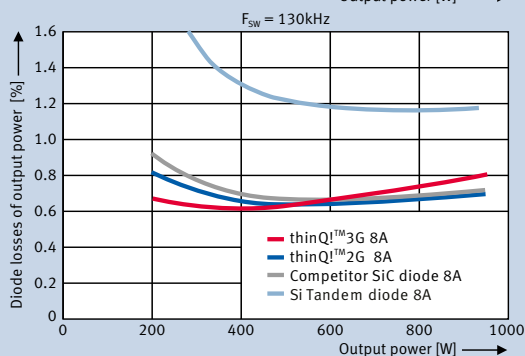
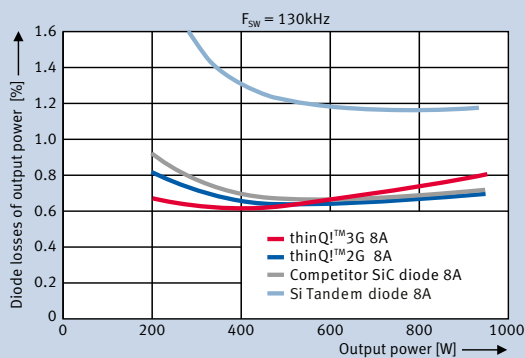


Third Generation thinQ!TM Silicon Carbide Schottky Diodes

Making Improved Efficiency now More Affordable

The new third generation of Infineon SiC Schottky diodes features the industry's lowest device capacitance for any given current rating, which further enhances overall system efficiency, especially at higher switching frequencies and under low load conditions. Together with the third generation, Infineon adds a new package to the already available TO-220 and D²PAK: the DPAK. The small form factor of the DPAK makes it particularly interesting for high power density surface mount designs, and its introduction further extends the Infineon offer of products in order to account at best for the different customer needs.



Features

- Lowest switching losses due to lowest Q_c for any current rating in the market
- Fully surge-current stable, high reliability and ruggedness
- Lower cost

Benefits


- System efficiency improvements at light & medium load
- Enabling higher frequency designs and increased power density solutions
- Lower system costs due to reduced cooling requirements
- Broadest range of current ratings and lower costs/Amp. for cost-effective performance improvements


Applications

- SMPS e.g. CCM PFC
- LCD, PDP
- Lighting
- UPS, Solar applications
- Motor Drives

Third Generation thinQ!TM Silicon Carbide Schottky Diodes

Product Portfolio

	Voltage	I_F [A]	Q_C (typ.) [nC]	I_{FSM} [A]	Type	Status
TO-252 DPAK 	600V	3	3.2	11.5	IDD03SG60C	in production
		4	4.5	18.0	IDD04SG60C	
		5	6.0	26.0	IDD05SG60C	
		6	8.0	32.0	IDD06SG60C	
		8	12.0	42.0	IDD08SG60C	
		9	15.0	49.0	IDD09SG60C	
		10	16.0	51.0	IDD10SG60C	
		12	19.0	59.0	IDD12SG60C	

	Voltage	I_F [A]	Q_C (typ.) [nC]	I_{FSM} [A]	Type	Status
TO-220 real2pin 	600V	3	3.2	11.5	IDH03SG60C	in production
		4	4.5	18.0	IDH04SG60C	
		5	6.0	26.0	IDH05SG60C	
		6	8.0	32.0	IDH06SG60C	
		8	12.0	42.0	IDH08SG60C	
		9	15.0	49.0	IDH09SG60C	
		10	16.0	51.0	IDH10SG60C	
		12	19.0	59.0	IDH12SG60C	

Published by
Infineon Technologies Austria AG
9500 Villach, Austria

© 2011 Infineon Technologies AG.
All Rights Reserved.

Visit us:
www.infineon.com

Order Number: B152-H9356-G2-X-7600-DB2011-0018
Date: 11 / 2011

ATTENTION PLEASE!

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie"). With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

INFORMATION

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office (www.infineon.com).

WARNINGS

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office. Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.