

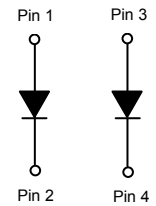
Silicon Power Schottky Diode

V_{RRM}	=	45 V
I_F	=	400 A

Features

- High Surge Capability

Package



SOT – 227

Maximum Ratings at $T_j = 125\text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	Values	Unit
Repetitive peak reverse voltage	V_{RRM}		45	V
RMS reverse voltage	V_{RMS}		32	V
DC blocking voltage	V_{DC}		45	V
Continuous forward current	I_F	$T_C \leq 85\text{ }^\circ\text{C}$	400	A
Operating temperature	T_j		-40 to 175	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to 175	$^\circ\text{C}$

Electrical Characteristics at $T_j = 125\text{ }^\circ\text{C}$, unless otherwise specified (Per Leg)

Parameter	Symbol	Conditions	Values			Unit
			min.	typ.	max.	
Diode forward voltage	V_F	$I_F = 200\text{ A}, T_j = 25\text{ }^\circ\text{C}$		1.1	1.2	V
		$I_F = 200\text{ A}, T_j = 125\text{ }^\circ\text{C}$		1		
Reverse current	I_R	$V_R = 36\text{ V}, T_j = 25\text{ }^\circ\text{C}$		1.2	5	μA
		$V_R = 36\text{ V}, T_j = 125\text{ }^\circ\text{C}$		835	2500	
Total capacitance	C	$V_R = 1\text{ V}, f = 1\text{ MHz}, T_j = 25\text{ }^\circ\text{C}$		4910		pF
		$V_R = 20\text{ V}, f = 1\text{ MHz}, T_j = 25\text{ }^\circ\text{C}$		1399		
		$V_R = 45\text{ V}, f = 1\text{ MHz}, T_j = 25\text{ }^\circ\text{C}$		1032		

Thermal Characteristics

Thermal resistance, junction - case	R_{thJC}	2.16	$^\circ\text{C}/\text{W}$
-------------------------------------	------------	------	---------------------------

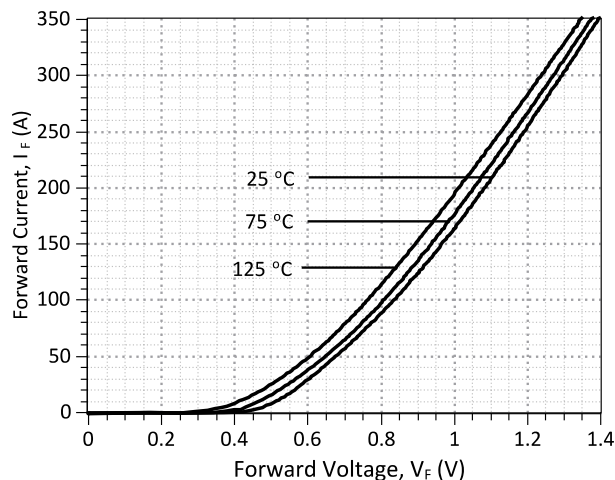


Figure 1: Typical Forward Characteristics(Per Leg)

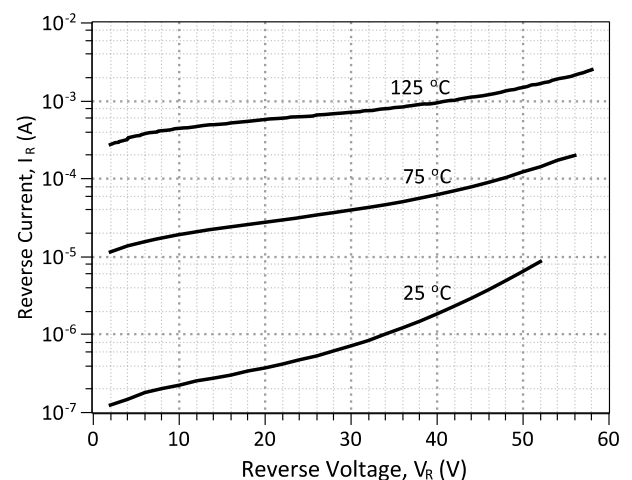


Figure 2: Typical Reverse Characteristics(Per Leg)

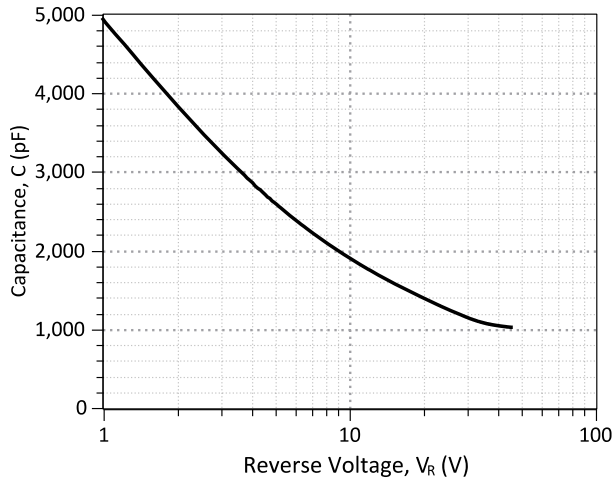
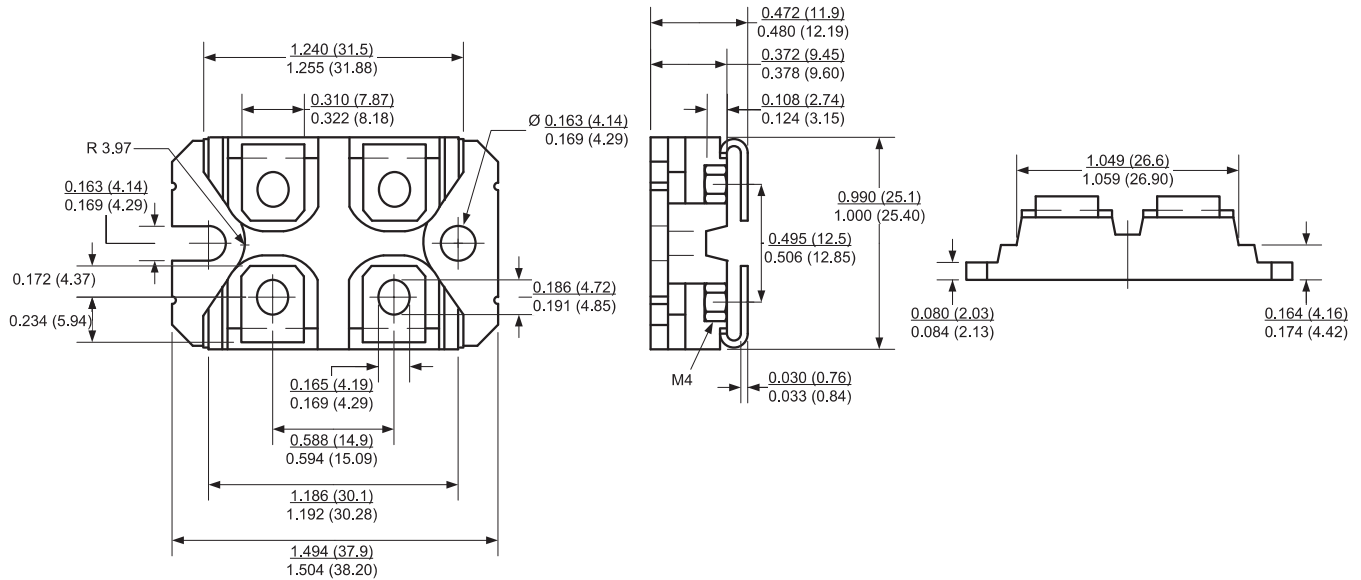


Figure 3: Typical Junction Capacitance vs Reverse Voltage Characteristics(Per Leg)

Package Dimensions:

SOT-227

PACKAGE OUTLINE



NOTE

1. CONTROLLED DIMENSION IS INCH. DIMENSION IN BRACKET IS MILLIMETER.
2. DIMENSIONS DO NOT INCLUDE END FLASH, MOLD FLASH, MATERIAL PROTRUSIONS

Revision History

Date	Revision	Comments	Supersedes
2012/03/12	0	Initial release	

Published by

GeneSiC Semiconductor, Inc.
43670 Trade Center Place Suite 155
Dulles, VA 20166

GeneSiC Semiconductor, Inc. reserves right to make changes to the product specifications and data in this document without notice.

GeneSiC disclaims all and any warranty and liability arising out of use or application of any product. No license, express or implied to any intellectual property rights is granted by this document.

Unless otherwise expressly indicated, GeneSiC products are not designed, tested or authorized for use in life-saving, medical, aircraft navigation, communication, air traffic control and weapons systems, nor in applications where their failure may result in death, personal injury and/or property damage.