

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China













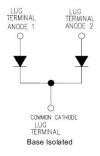
209CMQ135/209CMQ150 SCHOTTKY RECTIFIER



Features

- 175℃ T_J operation
- · Center tap module
- High purity, high temperature epoxy encapsulation for
- · enhanced mechanical strength and moisture resistance
- Low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Applications

- High current switching power supply
- Plating power supply
- Free-Wheeling diodes
- Reverse battery protection
- Converters
- UPS System
- Welding

Maximum Ratings:

Characteristics	Symbol	Condition		Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage	V _{RRM} V _{RWM}	-	135	209CMQ135	V
DC Blocking Voltage	VR		150	209CMQ150	•
Average Rectified Forward Current	leo	50% duty cycle @T _C =110°C,		100(Per Leg)	Α
Average Reclined Forward Current	lF(AV)	rectangular wave form	2	200(Per Device)	
Peak One Cycle Non-Repetitive Surge Current (Per Leg)	I _{FSM}	8.3 ms, half Sine pulse	1440		Α

- China Germany Korea Singapore United States
 - http://www.smc-diodes.com
 sales@ smc-diodes.com









Electrical Characteristics:

Characteristics	Symbol	Condition	Тур.	Max.	Units
Forward Voltage Drop(Per Leg)*	V _{F1}	@ 100A, Pulse, T _J = 25 °C @ 200A, Pulse, T _J = 25 °C	0.79 -	1.03 1.22	V
	V _{F2}	@ 100A, Pulse, T _J = 125 °C @ 200A, Pulse, T _J = 125 °C	0.62 -	0.71 0.82	٧
Reverse Current(Per Leg)*	I _{R1}	$@V_R = \text{rated } V_{R,} T_J = 25 ^{\circ}\text{C}$	0.002	3	mA
	I _{R2}	$@V_R = \text{rated } V_{R,} T_J = 125 ^{\circ}\text{C}$	0.7	45	mA
Junction Capacitance(Per leg)	Ст	$@V_R = 5V, T_C = 25 °C$ $f_{SIG} = 1MHz$	2300	3000	pF
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

^{*} Pulse width < 300 µs, duty cycle < 2%

Thermal-Mechanical Specifications:

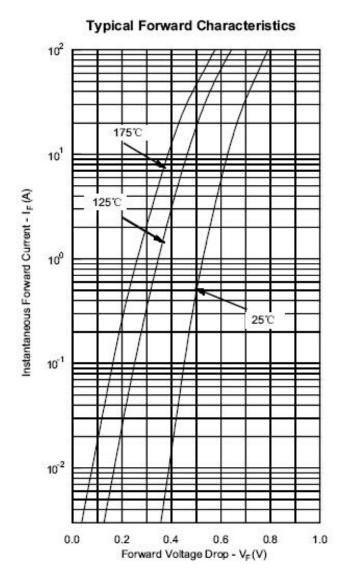
Characteristics	Symbol	Condition	Specific	Units	
Junction Temperature	TJ	-	-55 to +175		°C
Storage Temperature	T _{stg}	-	-55 to +175		°C
Typical Thermal Resistance Junction to Case(Per leg)	R ₀ JC	DC operation	0.70		°C/W
Typical Thermal Resistance Junction to Case(Per package)	$R_{ heta JC}$	DC operation	0.35		°C/W
Typical Thermal Resistance, case to Heat Sink	$R_{ heta cs}$	Mounting surface, smooth and greased	0.10		°C/W
Mounting Torque	Тм	-	Mounting Torque	24(min) 35(max)	- Kg-cm
			Terminal Torque	35(min) 46(max)	
Approximate Weight	wt	-	79 g		
Case Style	PRM4 Isolated				



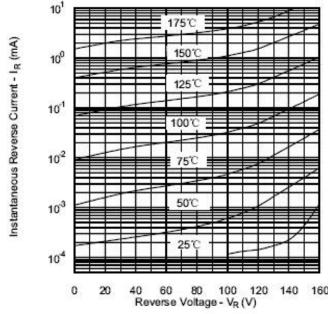




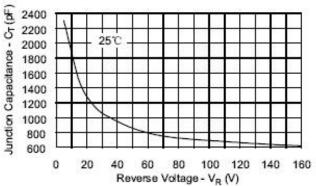
Ratings and Characteristics Curves



Typical Reverse Characteristics



Typical Junction Capacitance



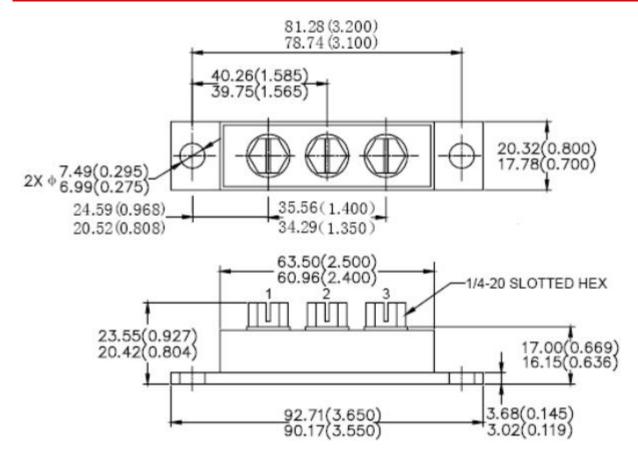






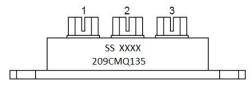


Mechanical Dimensions PRM4 Isolated(Millimeters/Inches)



Please Note: Anode 1 = Terminal 1; Anode 2 = Terminal 3; Common Cathode = Terminal 2 Suffix R Denotes for Reversed Polarity.

Marking Diagram



Where XXXX is YYWW

209CMQ135 = Part name SS = SS YY = Year WW = Week

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping	
209CMQ SERIES	PRM4 Isolated (Pb-Free)	9 pcs/box	

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

- China Germany Korea Singapore United States
 - http://www.smc-diodes.com
 sales@ smc-diodes.com









DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..