

Green Products

MMBD914 SURFACE MOUNT FAST SWITCHING DIODE

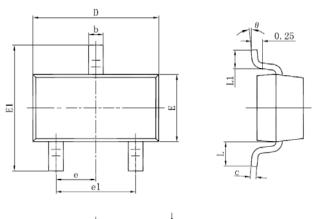
Features:

- **High Conductance**
- **Fast Switching**
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose and Switching
- Plastic Material –UL Recognition Flammability Classification 94V-O
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



- Case: SOT-23, Molded Plastic
- Terminals: Plated leads Solderable per MIL-STD-202, Method 208
- **Polarity: See Diagram**
- Weight: 0.008 grams(approx.)
- **Mounting Position: Any**
- Marking: 5D

Mechanical Dimensions: In mm/Inches

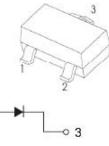


Cumbal	Dimensions	In Millimeters	Dimensions In Inches			
Symbol	Min.	Max.	Min.	Max.		
Α	0.900	1.150	0.035	0.045		
A1	0.000	0.100	0.000	0.004		
A2	0.900	1.050	0.035	0.041		
Q	0.300	0.500	0.012	0.020		
C	0.080	0.150	0.003	0.006		
ם	2.800	3.000	0.110	0.118		
Е	1.200	1.400	0.047	0.055		
E1	2.250	2.550	0.089	0.100		
e	0.950 TYP.		0.037 TYP.			
e1	1.800	2.000	0.071	0.079		
١	0.550 REF.		0.022 REF.			
L1	0.300	0.500	0.012	0.020		
Φ	0°	8°	°	8°		

SOT-23

Note: If date code is before 2016 year, please contact with factory about marking.

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









Green Products

Ordering Information:

Device	Package	Shipping
MMBD914	SOT-23	3000pcs / reel
IVIIVIDD9 14	(Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings @TA=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$egin{array}{c} V_{RRM} \ V_{RWM} \ V_{R} \end{array}$	100	٧
Average Rectified Output Current	lo	300	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.0	А
Power Dissipation	P _d	350	mW
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics @T_A=25°C unless otherwise specified

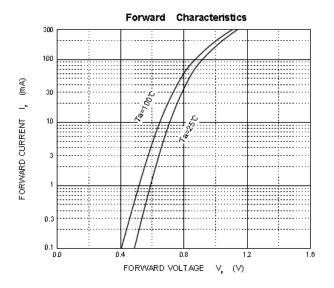
Characteristic	Symbol	Min	Max	Unit	Test Condition
Forward Voltage	V _F	-	0.715 0.855 1.00 1.25	٧	@I _F =1mA @I _F =10mA @I _F =50mA
Reverse Leakage Current	I _R	-	1.0 25	uA nA	@V _R =75V @V _R =20V
Junction Capacitance	Cj	-	2.0	pF	V _R =0V, f=1.0MHz
Reverse Recovery Time	t _{rr}	-	4.0	ns	$I_F=I_R=10$ mA, $I_{RR}=0.1 \times I_R$

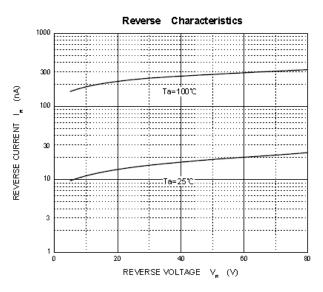
Note: 1. Device mounted on fiberglass substrate 40×40×1.5mm

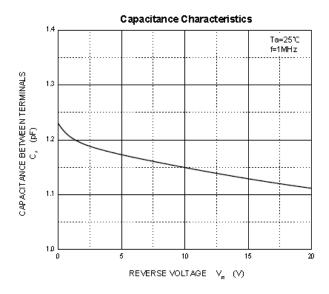
[•] http://www.smc-diodes.com - sales@ smc-diodes.com •

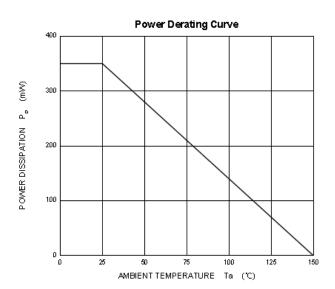


Green Products









[•] China - Germany - Korea - Singapore - United States •

[•] http://www.smc-diodes.com - sales@ smc-diodes.com •





Green Products

DISCL AIMER

- 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..