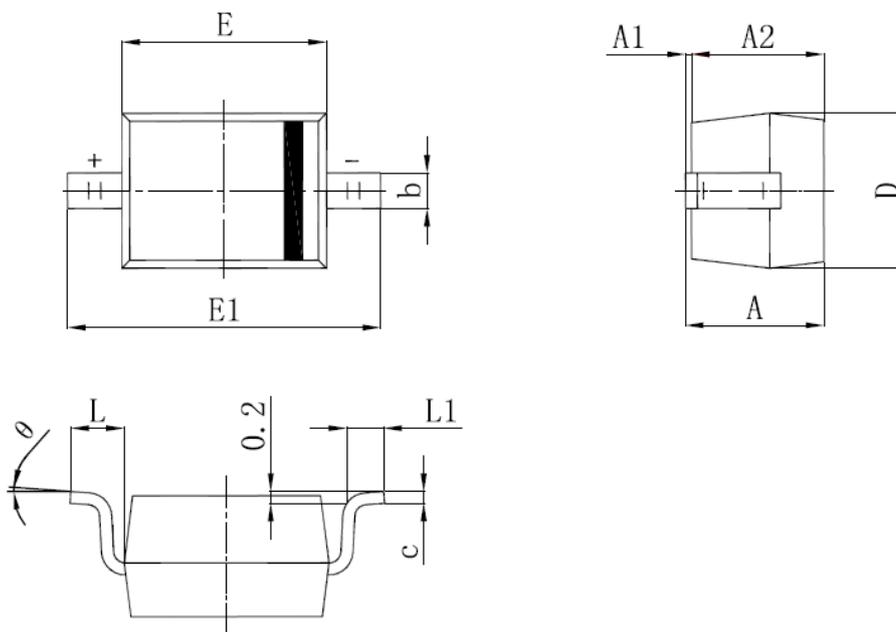


CMDSH-3 SCHOTTKY BARRIER DIODE

Description:

CMDSH-3 type is a silicon Schottky diode, manufactured in a surface mount package, designed for fast switching applications requiring a low forward voltage drop.

Mechanical Dimensions: In mm / Inches



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0° - 8°		0° - 8°	

SOD-323

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



Marking Diagram:



S1 = Part Name

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
CMDSH-3	SOD-323 (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 @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Reverse Voltage	V_{RRM}	30	V
Average Forward Current	I_O	100	mA
Power Dissipation	P_D	250	mW
Power Dissipation($T_L = 25^{\circ}\text{C}$)	P_D	833	mW
Peak Forward Surge Current ($t_p=8.3\text{ms}$)	I_{FSM}	750	mA
Operating Junction Temperature Range	T_J	-65 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Thermal Resistance	$R_{\theta JL}$	150	$^{\circ}\text{C}/\text{W}$
Case Style	SOD-323		

Electrical Characteristics:

Characteristics	Symbol	Condition	Min	Typ.	Max.	Units
Forward Voltage Drop	V_F	@ $I_F = 50\text{mA}, T_A = 25^{\circ}\text{C}$	-	-	0.55	V
		@ $I_F = 100\text{mA}, T_A = 25^{\circ}\text{C}$	-	-	0.80	
Reverse Recovery Voltage	V_{BR}	@ $I_F = 100\mu\text{A}$	30	-	-	V
Reverse Current	I_R	@ $V_R = 25\text{V}, T_J = 25^{\circ}\text{C}$	-	-	10	μA
Typical Junction Capacitance	C_j	@ $V_R=10.0\text{V}, T_c=25^{\circ}\text{C}$ $f_{SIG} = 1\text{MHz}$	-	7.0	-	pF



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..