

SD101AWS THRU SD101CWS

Small Signal Schottky Diodes

Features

- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)
- Low Reverse Recovery Time
- Low Reverse Capacitance
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection

Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by Cathode Band
- Marking : SD101AWS---S1 ; SD101BWS---S2; SD101CWS---S3

Maximum Ratings @ 25°C Unless Otherwise Specified

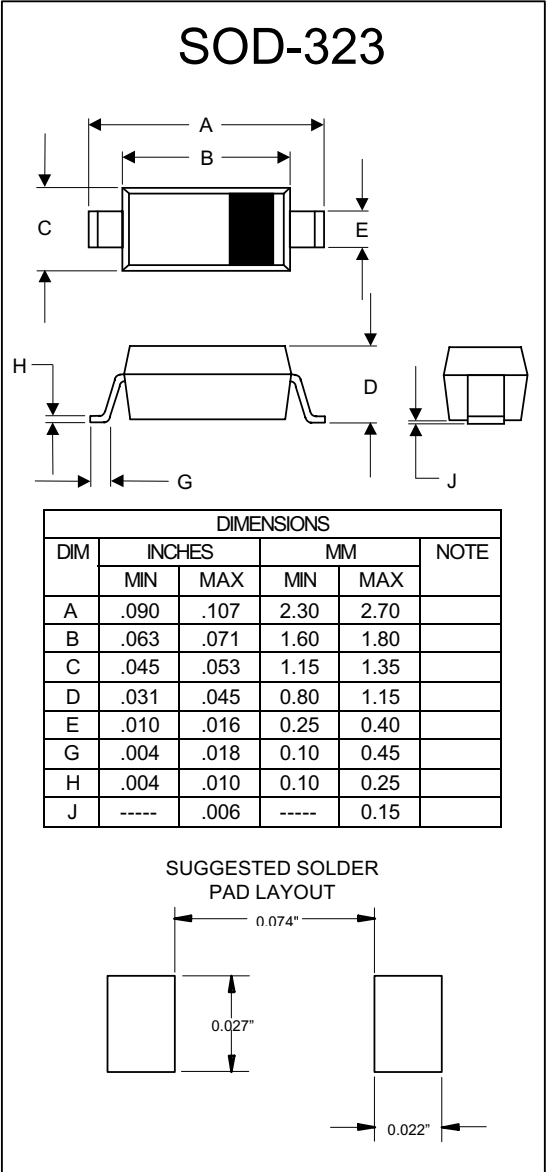
Characteristic	Symbol	SD101AWS	SD101BWS	SD101CWS
Peak Repetitive Reverse Voltage	V_{RRM}			
Working Peak Reverse Voltage	V_{RWM}	60V	50V	40V
DC Blocking Voltage	V_R			
RMS Reverse Voltage	$V_{R(RMS)}$	42V	35V	28V
Maximum single cycle surge 10us square wave	I_{FSM}	2.0A		
Power Dissipation(Note 1)	P_d	400mW		
Thermal Resistance, Junction to Ambient	R	650°C/W		
Operating Junction Temp. Range	T_j	-55 to +125°C		
Storage Temp. Range	T_{STG}	-55 to +150°C		

Electrical Characteristics @ 25°C Unless Otherwise Specified

Characteristic	Symbol	Max	Test Condition
Leakage Current	SD101AWS SD101BWS SD101CWS	200nA 200nA 200nA	$V_R=50V$ $V_R=40V$ $V_R=30V$
Maximum Forward Voltage Drop	SD101AWS SD101BWS SD101CWS	0.41V 0.4V .39V	$I_F=1mA$ $I_F=15mA$
	SD101AWS SD101BWS SD101CWS	1V 0.95V 0.9V	
Junction Cap.	SD101AWS SD101BWS SD101CWS	2.0pF 2.1pF 2.2pF	$V_R=0V, f=1.0MHz$
Reverse Recovery Time	t_{rr}	1ns	$I_F=I_R=5mA, \text{recover to } 0.1I_R$

Note: 1

Valid provided that electrodes are kept at ambient temperature



SD101AWS thru SD101CWS

Figure 1. Typical variation of forward current vs. fwd. Voltage

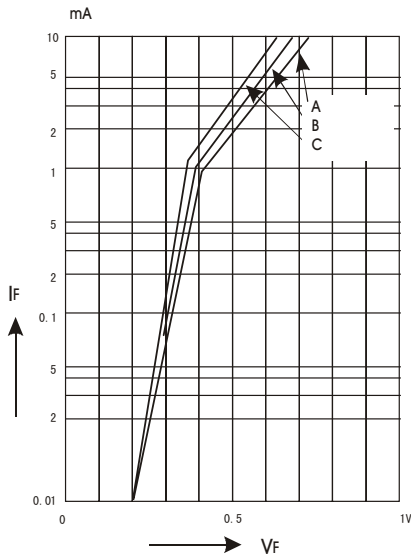


Figure 2. Typical forward conduction curve

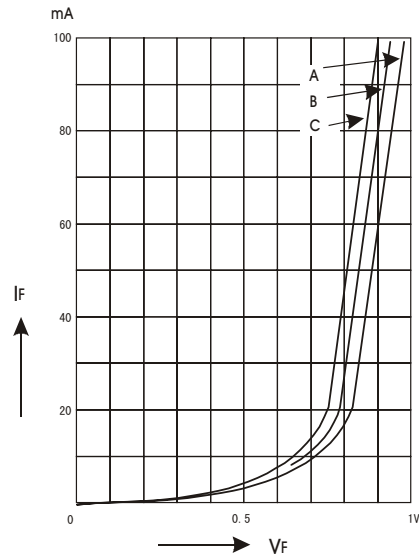


Figure 3. Typical variation of reverse current at versus temperature

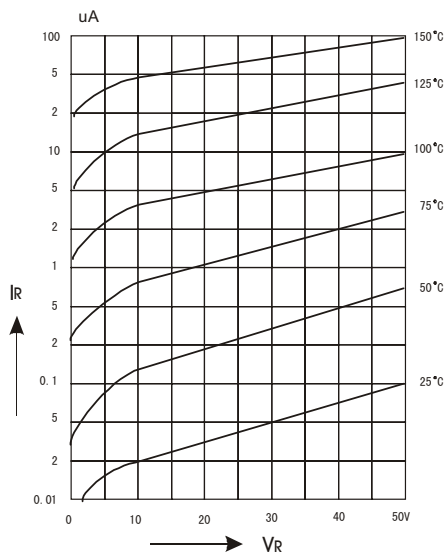
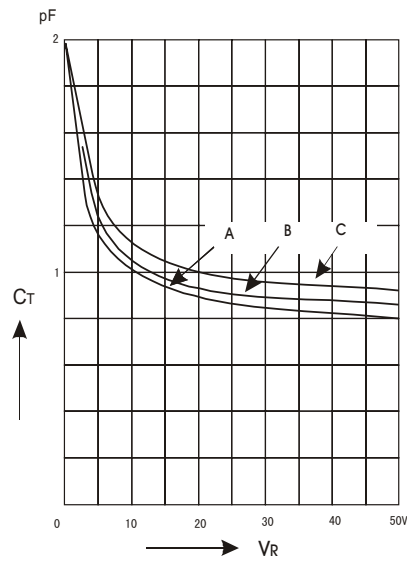


Figure 4. Typical capacitance curve as a function of reverse voltage





Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com