

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
- Halogen free available upon request by adding suffix "-HF"

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

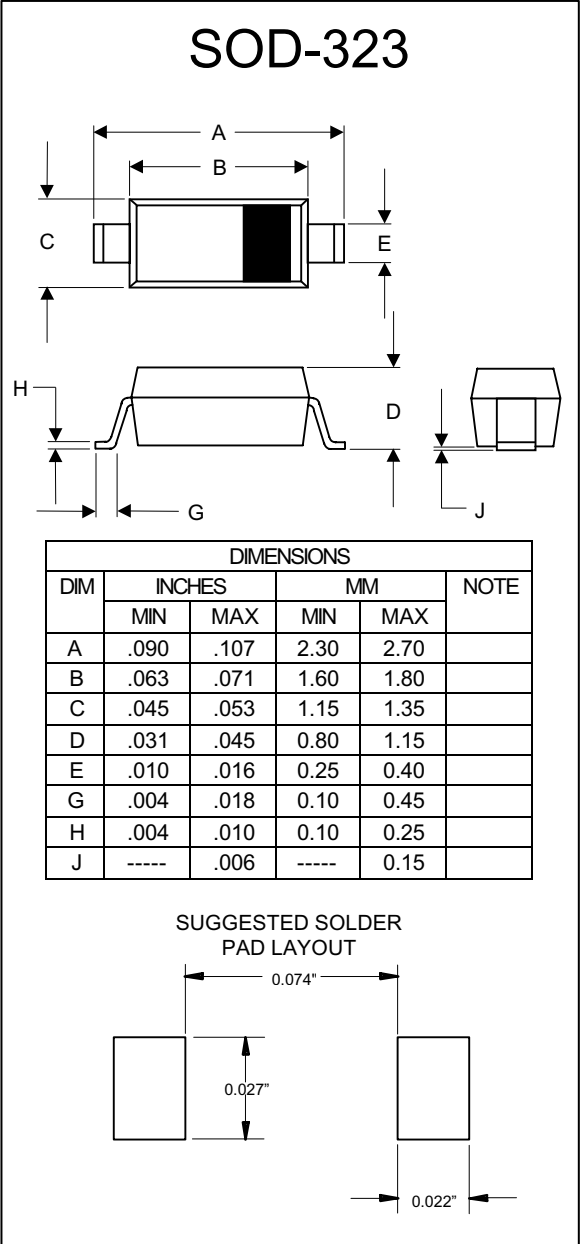
Characteristic	Symbol	SD101AWS	SD101BWS	SD101CWS
Peak Repetitive Reverse Voltage	V_{RRM}			
Working Peak Reverse Voltage	V_{RWM}	60V	50V	40V
DC Blocking Voltage	V_R			
RMS Reverse Voltage	$V_{R(RMS)}$	42V	35V	28V
Maximum single cycle surge 10us square wave	I_{FSM}	2.0A		
Power Dissipation(Note 1)	P_d	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	I_R	200nA	$V_R=50V$
		200nA	$V_R=40V$
		200nA	$V_R=30V$
Maximum Forward Voltage Drop	V_F	0.41V	$I_F=1mA$
		0.4V	$I_F=15mA$
		.39V	
		1V	
		0.95V	
		0.9V	
Junction Cap.	C_j	2.0pF	$V_R=0V, f=1.0MHz$
		2.1pF	
		2.2pF	
Reverse Recovery Time	t_{rr}	1ns	$I_F=I_R=5mA, recover to 0.1I_R$

Note: 1

Valid provided that electrodes are kept at ambient temperature



SD101AWS thru SD101CWS



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

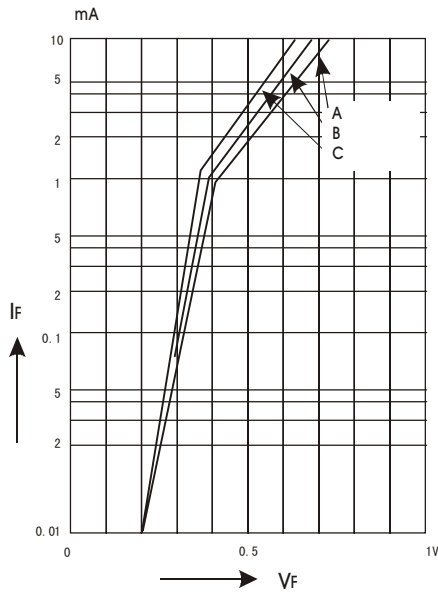


Figure 2. Typical forward conduction curve

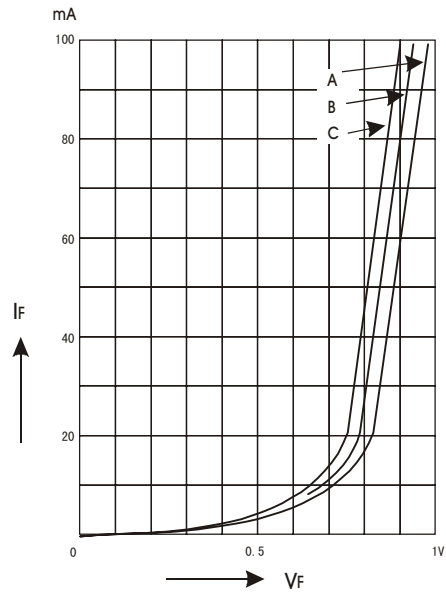


Figure 3. Typical variation of reverse current at versus temperature

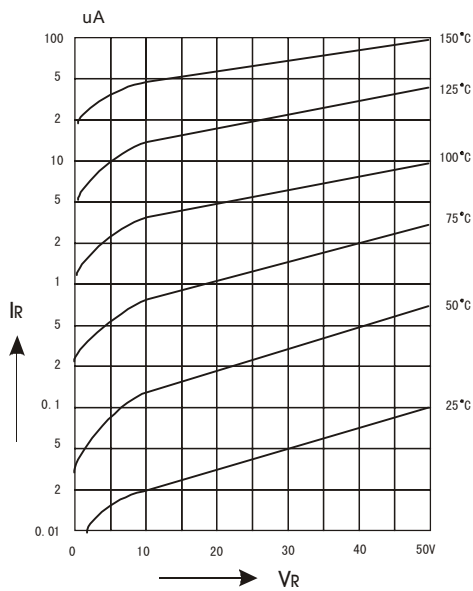
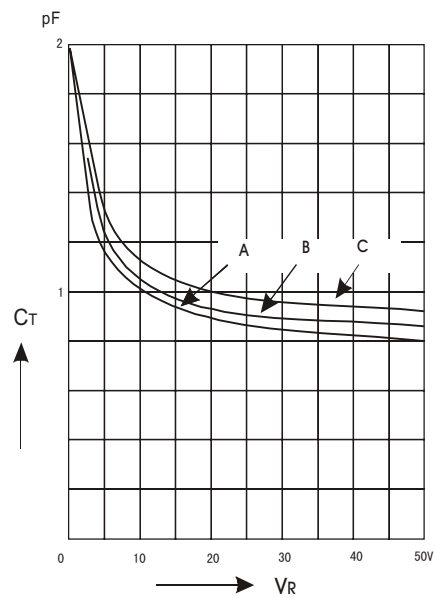


Figure 4. Typical capacitance curve as a function of reverse voltage





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Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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