



**THE DATASHEET OF  
SD101BWS-TP**



## Features

- Low Reverse Recovery Time
- Low Reverse Capacitance
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 250°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD101AWS	S1	60V	42V	60V
SD101BWS	S2	50V	35V	50V
SD101CWS	S3	40V	28V	40V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Forward Continuous Current	$I_{F(AV)}$	15mA	
Peak Forward Surge Current	$I_{FSM}$	2A	t=8.3ms
Power Dissipation	$P_d$	400mW	Note 2
Maximum Instantaneous Forward Voltage	$V_F$	SD101AWS	0.41V
		SD101BWS	0.40V
		SD101CWS	0.39V
			$I_F=1mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	SD101AWS	200nA
		SD101BWS	
		SD101CWS	
Maximum Reverse Recovery Time	$t_{rr}$	1.0ns	$I_F=I_R=5mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$
			Measured at 1.0MHz, $V_R=0.0V$
Maximum Junction Capacitance	$C_J$	SD101AWS	2.0pF
		SD101BWS	2.1pF
		SD101CWS	2.2pF

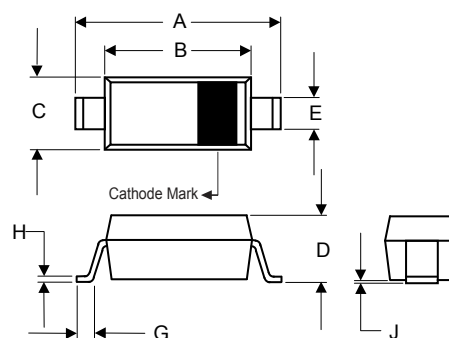
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Note:2. Valid provided that electrodes are kept at ambient temperature

# 400mW Small Signal Schottky Diode

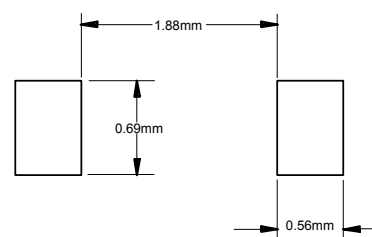
## 40 to 60 Volts

## SOD-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

## Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

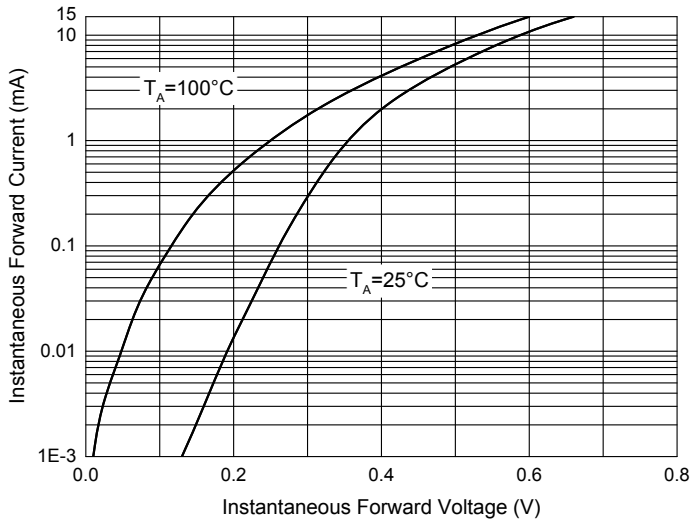


Fig. 2 - Typical Reverse Leakage Characteristics

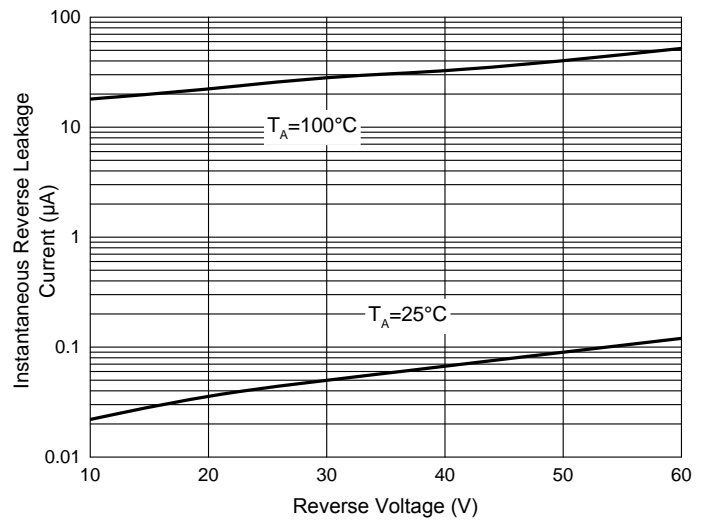
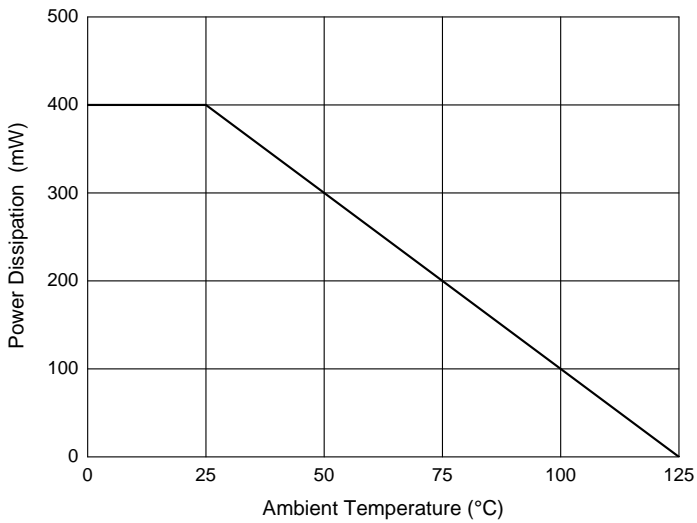


Fig. 3 - Power Derating Curve



## Ordering Information

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

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