



# THE DATASHEET OF SD101BW-TP



## Features

- Low Forward Voltage Drop
- For General Purpose Applications
- 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
SD101AW	S1	60V	42V	60V
SD101BW	S2	50V	35V	50V
SD101CW	S3	40V	28V	40V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

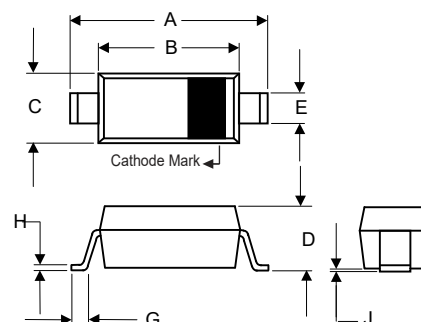
Average Forward Current	$I_{F(AV)}$	15mA	
Peak Forward Surge Current	$I_{FSM}$	2.0A	t=8.3ms
Power Dissipation(Note 2)	$P_d$	400mW	
Maximum Forward Voltage Drop	$V_F$	0.41V 0.40V 0.39V	$I_{FM}=1mA;$  $I_{FM}=15mA;$
Maximum Leakage Current	$I_R$	200nA	$V_R = 50V$ $V_R = 40V$ $V_R = 30V$
Reverse Recovery Time	$t_{rr}$	1ns	$I_F=I_R=5mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$
Junction Capacitance	$C_J$	2.0pF 2.1pF 2.2pF	Measured at f=1.0MHz, $V_R=0.0V$

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

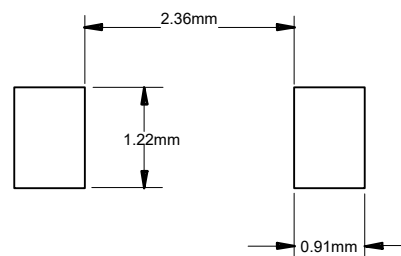
## SOD-123



### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.140	0.152	3.55	3.85	
B	0.100	0.112	2.55	2.85	
C	0.055	0.071	1.40	1.80	
D	----	0.053	----	1.35	
E	0.018	0.026	0.45	0.65	
G	0.006	----	0.15	----	
H	----	0.010	----	0.25	
J	----	0.006	----	0.15	

### Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

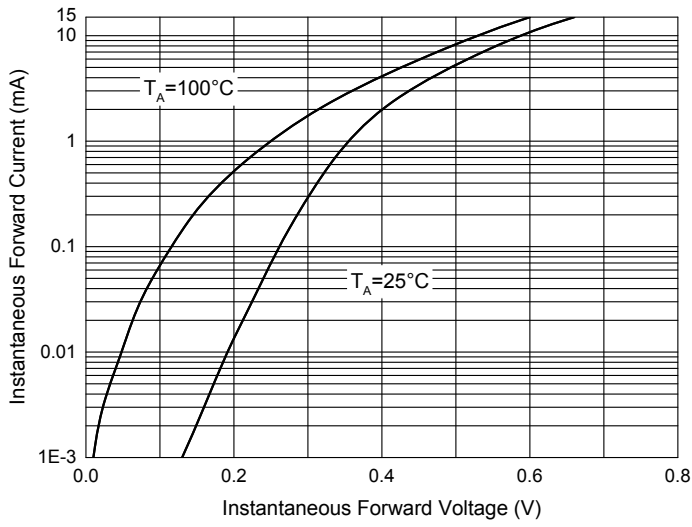


Fig. 2 - Typical Reverse Leakage Characteristics

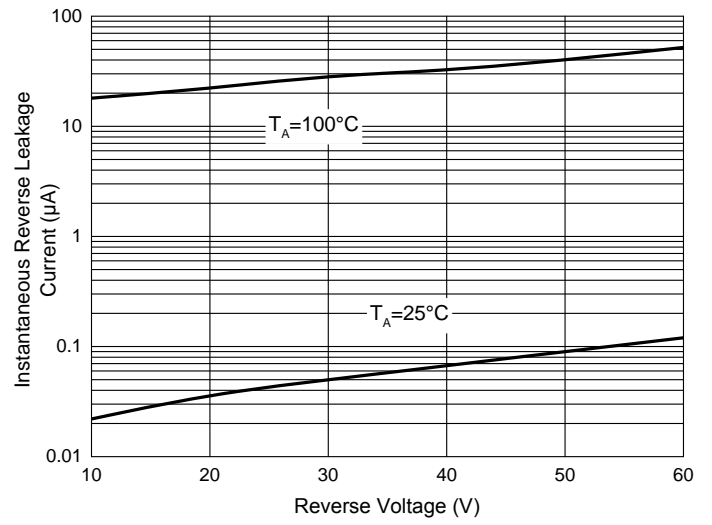
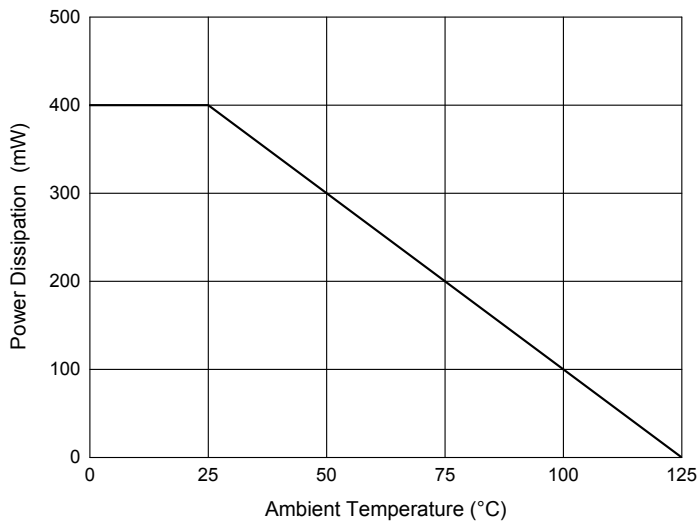


Fig. 3 - Power Derating Curve



## Ordering Information

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

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