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)

400mW Small Signal Schottky Diode 40 to 60 Volts

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

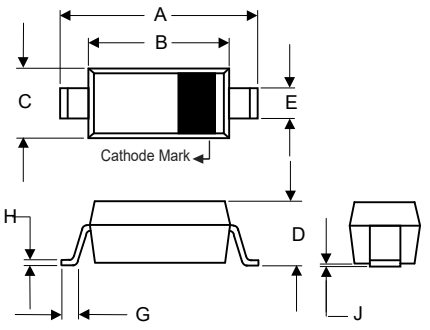
Electrical Characteristics @ 25°C Unless Otherwise Specified

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 SD101AW	V_F	0.41V	I_{FM}=1mA;
Maximum Forward Voltage Drop SD101BW	V_F	0.40V	I_{FM}=1mA;
Maximum Forward Voltage Drop SD101CW	V_F	0.39V	I_{FM}=1mA;
Maximum Forward Voltage Drop SD101AW	V_F	1.00V	I_{FM}=15mA;
Maximum Forward Voltage Drop SD101BW	V_F	0.95V	I_{FM}=15mA;
Maximum Forward Voltage Drop SD101CW	V_F	0.90V	I_{FM}=15mA;
Maximum Leakage Current SD101AW	I_R	200nA	VR = 50V
Maximum Leakage Current SD101BW	I_R	200nA	VR = 40V
Maximum Leakage Current SD101CW	I_R	200nA	VR = 30V
Reverse Recovery Time	t_{rr}	1ns	I_F=I_R=5mA, I_{rr}=0.1x I_R,R_L=100Ω
Junction Capacitance SD101AW	C_J	2.0pF	Measured at f=1.0MHz, V_R=0.0V
Junction Capacitance SD101BW	C_J	2.1pF	Measured at f=1.0MHz, V_R=0.0V
Junction Capacitance SD101CW	C_J	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.

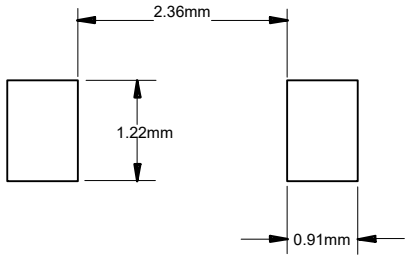
Note: 2. Valid provided that electrodes are kept at ambient Temperature

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

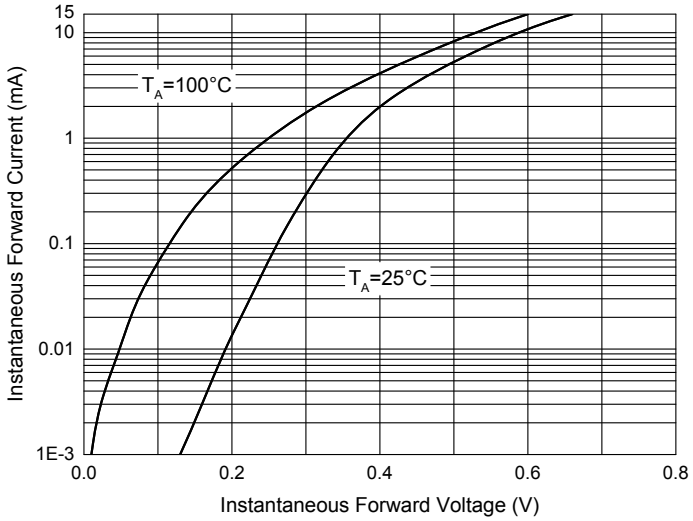


Fig. 2 - Typical Reverse Leakage Characteristics

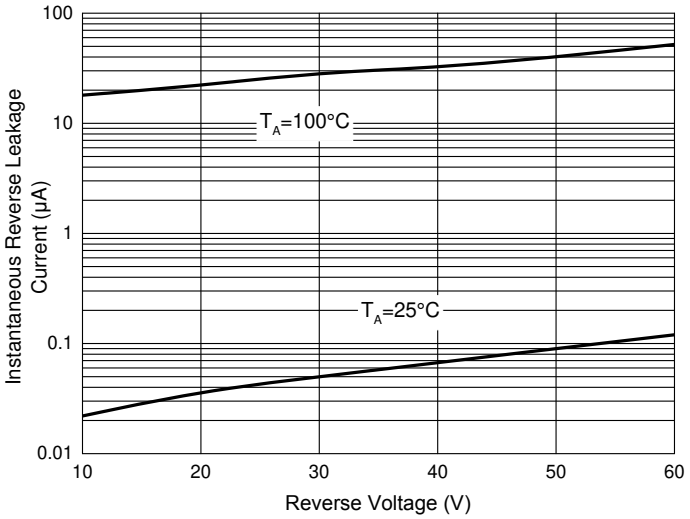
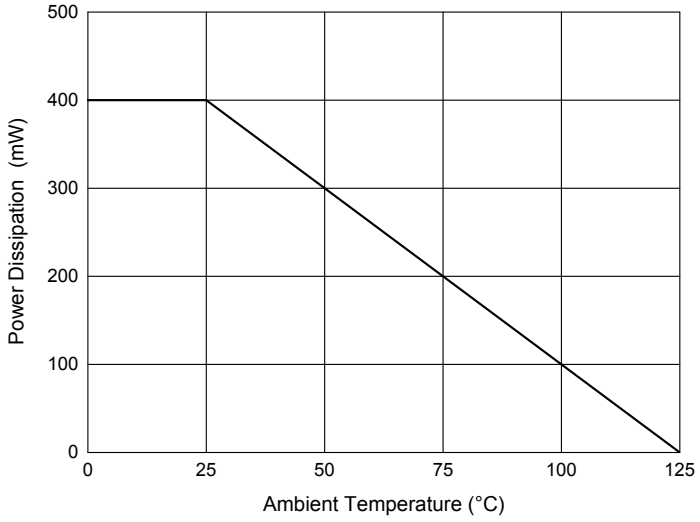


Fig. 3 - Power Derating Curve



Ordering Information

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

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