

## **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 Available Upon Request By Adding Suffix "-HF"
- 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

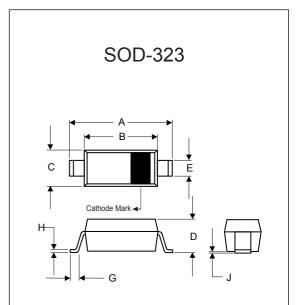
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage	
SD101AWS	S1	60V	42V	60V	
SD101BWS	S2	50V	35V	50V	
SD101CWS	S3	40V	28V	40V	

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Forward Continuous Curr	ent	$I_{F(AV)}$	15mA	
Peak Forward Surge Current		I <sub>FSM</sub>	2A	t=8.3ms
Power Dissipation		$P_d$	400mW	Note 1
Maximum Instantaneous	SD101AWS SD101BWS SD101CWS	V <sub>F</sub>	0.41V 0.40V 0.39V	I <sub>F</sub> =1mA
Forward Voltage	SD101AWS SD101BWS SD101CWS		1.00V 0.95V 0.90V	I <sub>F</sub> =15mA
Maximum DC Reverse Current At Rated DC Blocking Voltage	SD101AWS SD101BWS SD101CWS	I <sub>R</sub>	200nA	V <sub>R</sub> = 50V V <sub>R</sub> = 40V V <sub>R</sub> = 30V
Maximum Reverse Recovery Time		t <sub>rr</sub>	1.0ns	$I_F = I_R = 5 \text{mA}$ $I_{rr} = 0.1 \text{XIR}, R_L = 100 \Omega$
Maximum Junction Capacitance	SD101AWS SD101BWS SD101CWS	С	2.0pF 2.1pF 2.2pF	Measured at 1.0MHz, V <sub>R</sub> =0.0V

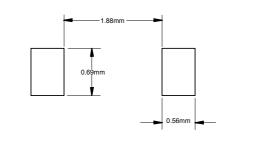
Note: 1. Valid provided that electrodes are kept at ambient temperature

# 400mW Small Signal Schottky Diode 40 to 60 Volts



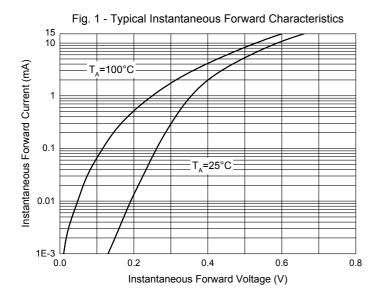
DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.090	0.107	2.30	2.70	
В	0.063	0.071	1.60	1.80	
С	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
Е	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
Н	0.004	0.010	0.10	0.25	
J		0.006		0.15	

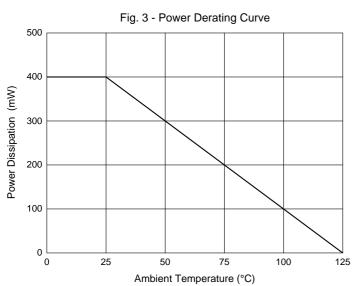
#### **Suggested Solder Pad Layout**

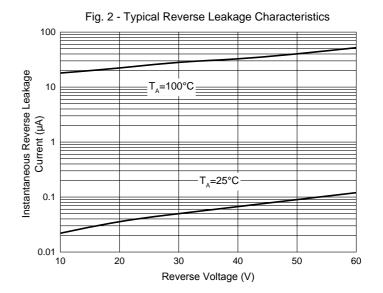




## **Curve Characteristics**









# **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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