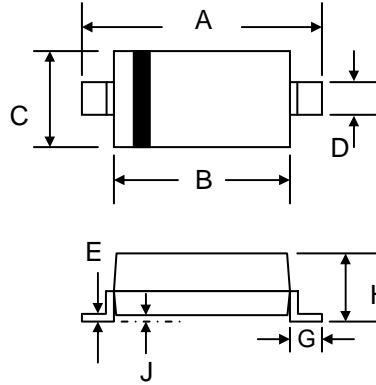


### Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O



SOD-323		
Dim	Min	Max
A	2.30	2.75
B	1.60	1.80
C	1.15	1.35
D	0.25	0.40
E	0.09	0.18
G	0.20	0.40
H	0.80	1.00
J	—	0.12
All Dimensions in mm		

### Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)
- Marking: Device Code, See Page 3
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

### Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SD101AWS	SD101BWS	SD101CWS	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	60	50	40	V
Working Peak Reverse Voltage	$V_{RWM}$				
DC Blocking Voltage	$V_R$				
Forward Continuous Current (Note 1)	$I_F$	15			mA
Non-Repetitive Peak Forward Surge Current @ $t = 10\mu\text{s}$	$I_{FSM}$	2.0			A
Power Dissipation	$P_d$	200			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625			$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +125			$^\circ\text{C}$

### Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SD101AWS	SD101BWS	SD101CWS	Unit
Forward Voltage Drop @ $I_F = 1.0\text{mA}$ @ $I_F = 15\text{mA}$	$V_{FM}$	0.41 1.00	0.40 0.95	0.39 0.90	V
Peak Reverse Leakage Current @ 80% DC Blocking Voltage	$I_{RM}$	200			nA
Total Junction Capacitance @ $V_R = 0\text{V}, f = 1.0\text{MHz}$	$C_T$	2.0	2.1	2.2	pF
Typical Reverse Recovery Time @ $I_F = I_R = 50\text{mA},$ $I_{RR} = 0.1 \times I_R, R_L = 100\Omega$	$t_{rr}$	1.0			nS

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

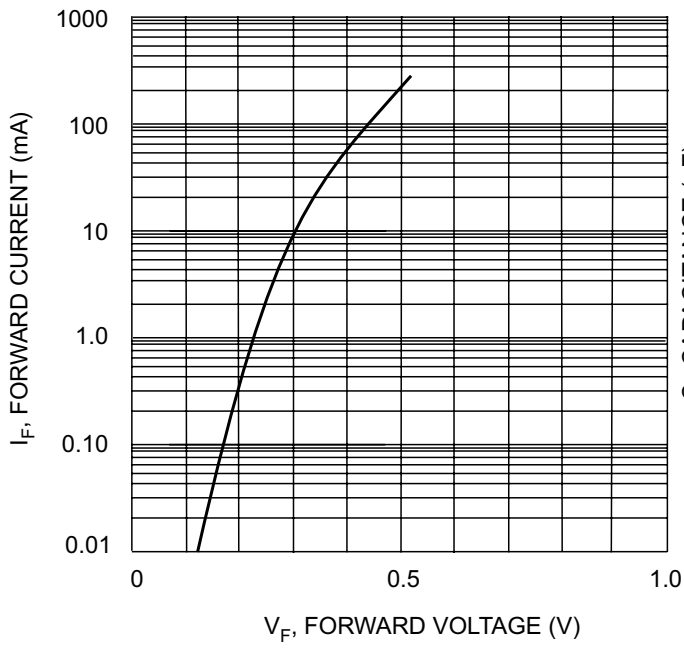


Fig. 1 Typical Forward Characteristics

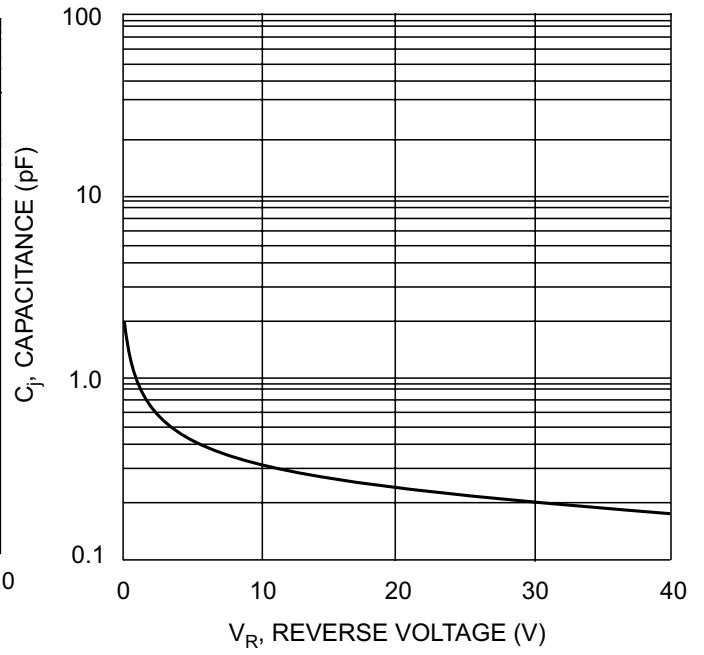


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

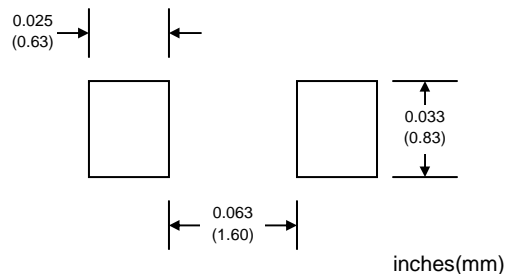
## MARKING INFORMATION



xx = Device Code, See Table Below

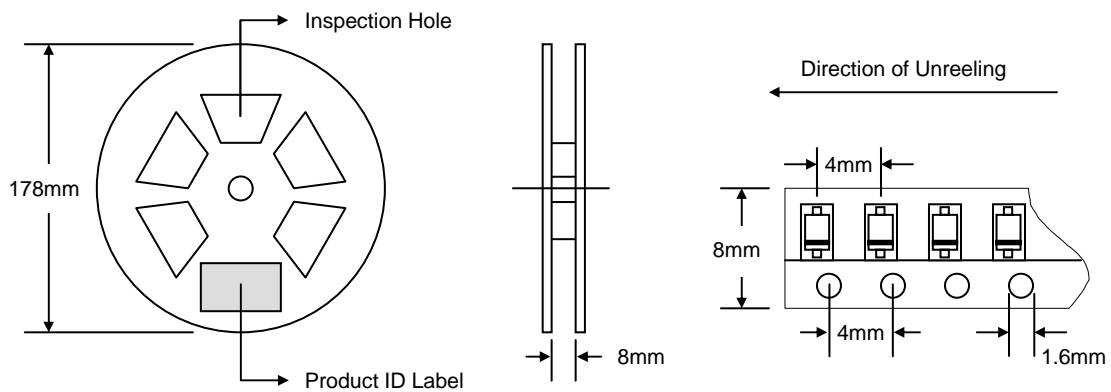
Mfg Site	SD101AWS	SD101BWS	SD101CWS
TW Plant	S2	S3	S4
CN Plant	S1	S2	S3

## RECOMMENDED FOOTPRINT



## PACKAGING INFORMATION

### TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	7.0

**Note:** 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.  
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SD101AWS-T1	SOD-323	3000/Tape & Reel
SD101BWS-T1	SOD-323	3000/Tape & Reel
SD101CWS-T1	SOD-323	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SD101AWS-T1-LF.**

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