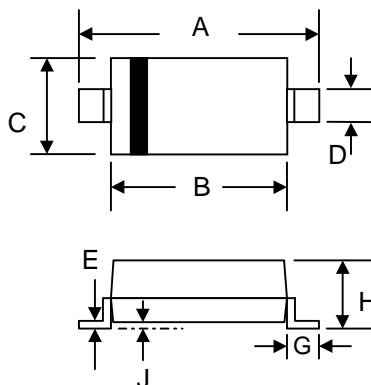


Features

- 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-123		
Dim	Min	Max
A	3.6	3.9
B	2.5	2.8
C	1.4	1.8
D	0.5	0.7
E	—	0.2
G	0.4	—
H	0.95	1.35
J	—	0.12
All Dimensions in mm		

Mechanical Data

- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.01 grams (approx.)
- Marking: SD101AW S2
SD101BW S3
SD101CW S4
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	SD101AW	SD101BW	SD101CW	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	60	50	40	V
Forward Continuous Current (Note 1)	I _F	15			mA
Non-Repetitive Peak Forward Surge Current @ t = 10μs	I _{FSM}	2.0			A
Power Dissipation	P _d	410			mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	300			°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +125			°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	SD101AW	SD101BW	SD101CW	Unit
Forward Voltage Drop @ I _F = 1.0mA @ I _F = 15mA	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 = 0V, f = 1.0MHz	C _T	2.0	2.1	2.2	pF
Typical Reverse Recovery Time @ I _F = I _R = 50mA, I _{RR} = 0.1 x I _R , R _L = 100Ω	t _{rr}	1.0			nS

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

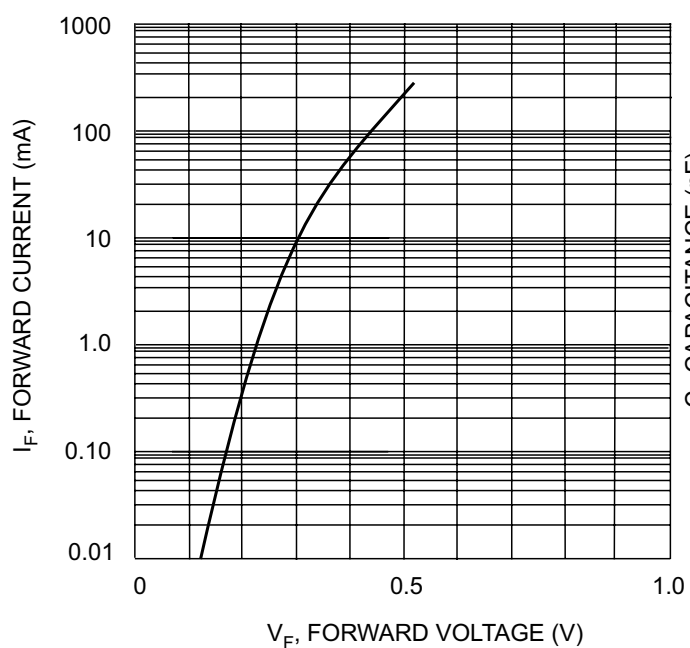


Fig. 1 Typical Forward Characteristics

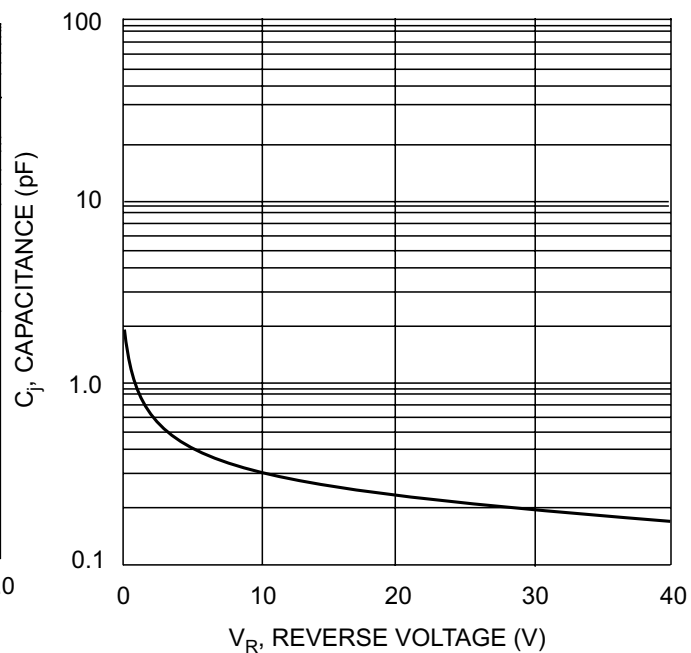


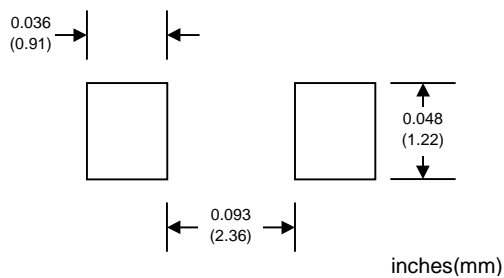
Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

MARKING INFORMATION



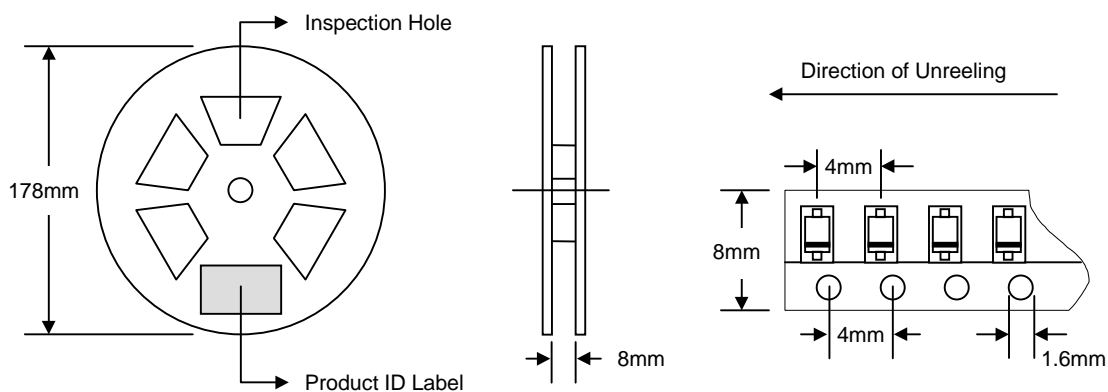
Cathode = Polarity Band
 Sx = Device Code
 x = 2 (SD101AW)
 3 (SD101BW)
 4 (SD101CW)

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	10.0

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
SD101AW-T1	SOD-123	3000/Tape & Reel
SD101BW-T1	SOD-123	3000/Tape & Reel
SD101CW-T1	SOD-123	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, SD101AW-T1-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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