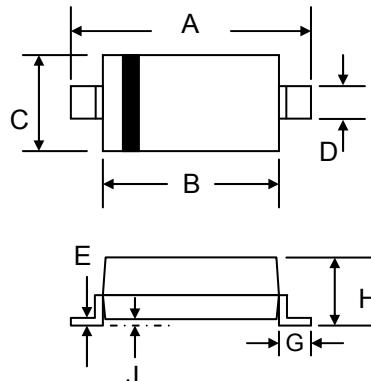


## Features

- Silicon Epitaxial Planar Die Construction
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- Plastic Material – UL Recognition Flammability Classification 94V-0



SOD-323		
Dim	Min	Max
A	2.30	2.75
B	1.60	1.80
C	1.20	1.40
D	0.25	0.40
E	0.05	0.15
G	0.20	0.40
H	—	1.10
J	—	0.10

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	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$		
Working Peak Reverse Voltage	$V_{RWM}$	75	V
DC Blocking Voltage	$V_R$		
Repetitive Peak Forward Current	$I_{FRM}$	500	mA
Continuous Forward Current	$I_o$	250	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\mu\text{s}$	$I_{FSM}$	4.0	A
@ $t = 1.0\text{s}$		1.0	
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C

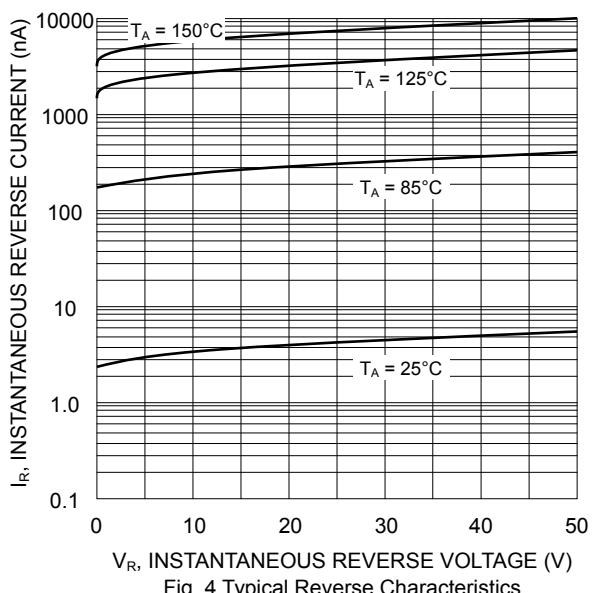
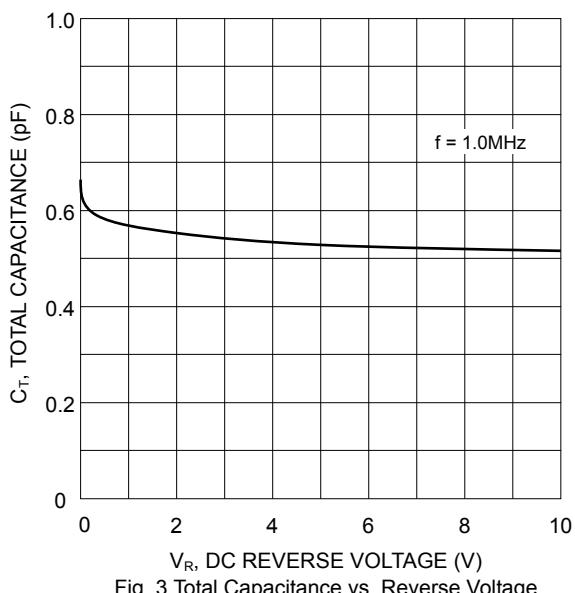
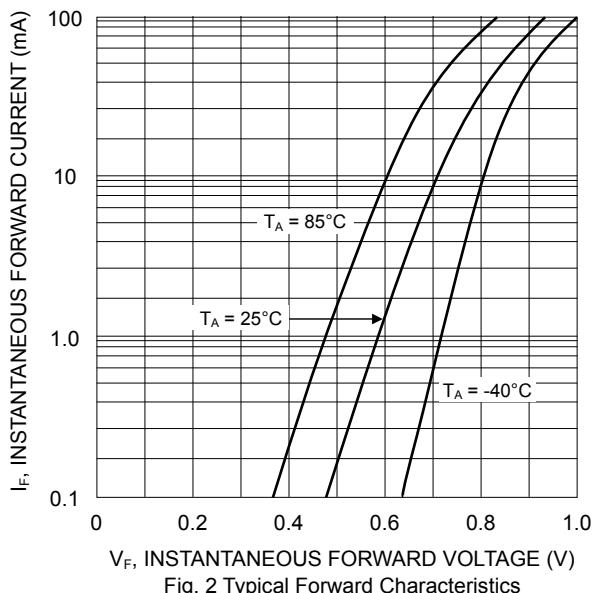
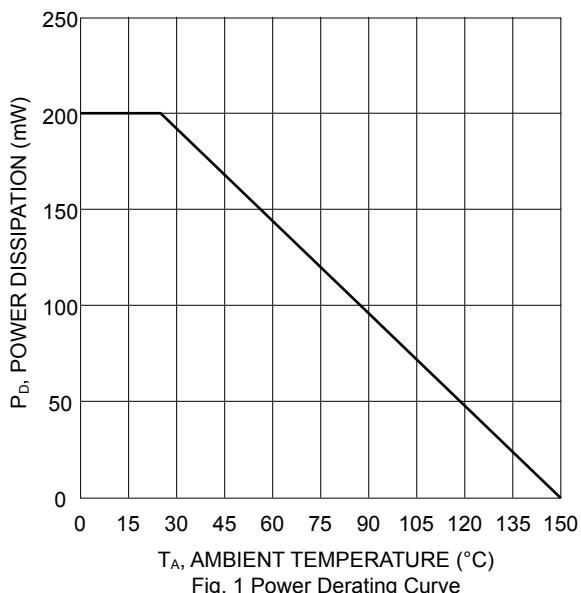
## Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	$P_D$	200	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R_{JA}$	625	°C/W

Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

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

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage @ $I_R = 10\mu\text{A}$	$V_{(\text{BR})}$	75			V
Forward Voltage Drop @ $I_F = 5.0\text{mA}$ @ $I_F = 10\text{mA}$ @ $I_F = 100\text{mA}$ @ $I_F = 150\text{mA}$	$V_{(\text{F})}$			0.72 0.855 1.0 1.25	V
Peak Reverse Leakage Current @ $V_R = 75\text{V}$ , $T_J = 25^\circ\text{C}$ @ $V_R = 25\text{V}$ , $T_J = 150^\circ\text{C}$ @ $V_R = 75\text{V}$ , $T_J = 150^\circ\text{C}$	$I_{(\text{RM})}$			2.5 30 50	$\mu\text{A}$
Diode Capacitance ( $V_R = 0\text{V}$ , $f = 1.0\text{MHz}$ )	$C_D$			4.0	pF
Reverse Recovery Time ( $I_F = I_R = 10\text{mA}$ , $I_{RR} = 0.1 \times I_R$ , $R_L = 100\Omega$ )	$t_{rr}$			4.0	nS



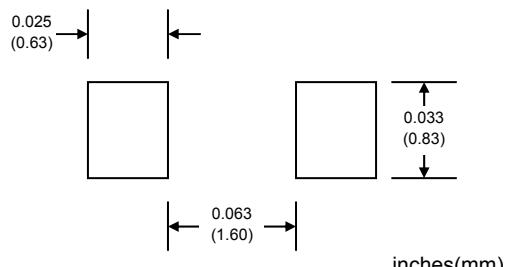
## MARKING INFORMATION



XX = Device Code, See Table Below

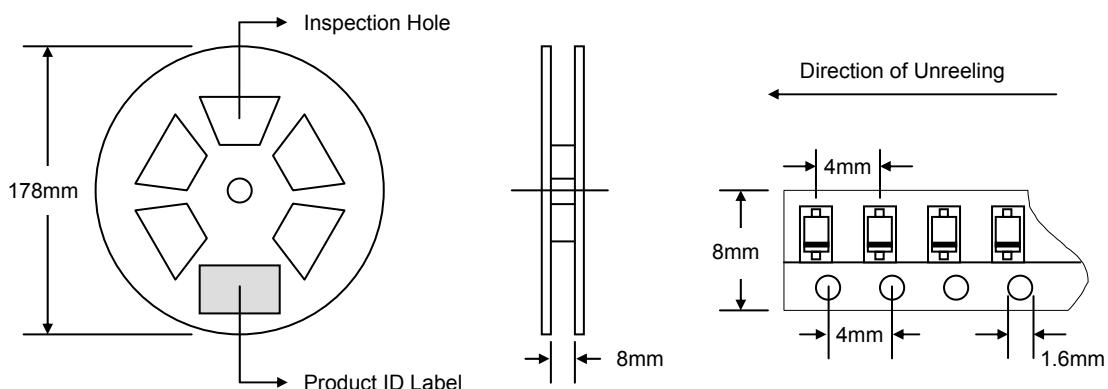
Mfg Site	Device Code
TW Plant	A3
CN Plant	T5

## RECOMMENDED FOOTPRINT



## PACKAGING INFORMATION

## TAPE &amp; 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
1N4448WS-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, 1N4448WS-T1-LF.**

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