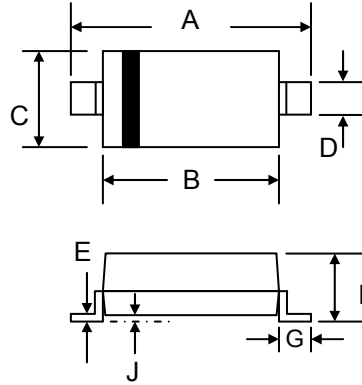


Features

- 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-123		
Dim	Min	Max
A	3.60	3.90
B	2.50	2.80
C	1.40	1.80
D	0.30	0.78
E	—	0.25
G	0.15	—
H	0.95	1.35
J	—	0.15
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: 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	1N4150W	1N4151W	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}	50	75	V	
Working Peak Reverse Voltage	V_{RWM}				
DC Blocking Voltage	V_R				
Repetitive Peak Forward Current	I_{FRM}	400	300	mA	
Continuous Forward Current	I_O	200	150	mA	
Non-Repetitive Peak Forward Surge Current	I_{FSM}	@ $t = 1.0\mu\text{s}$	4.0	2.0	A
		@ $t = 1.0\text{s}$	1.0	0.5	
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150		$^\circ\text{C}$	

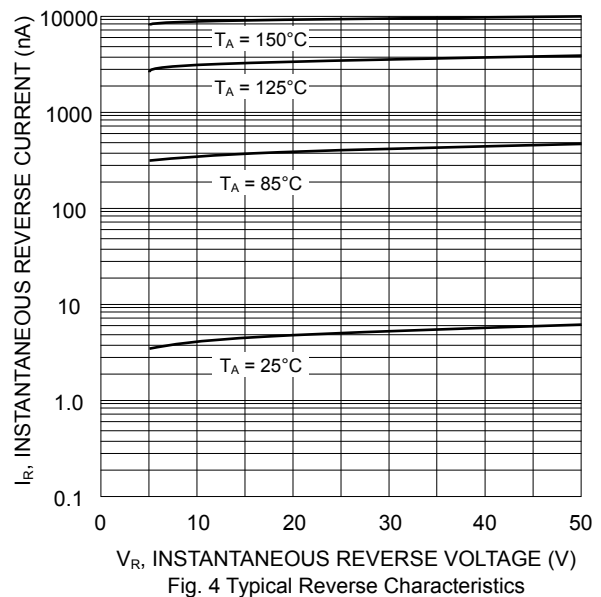
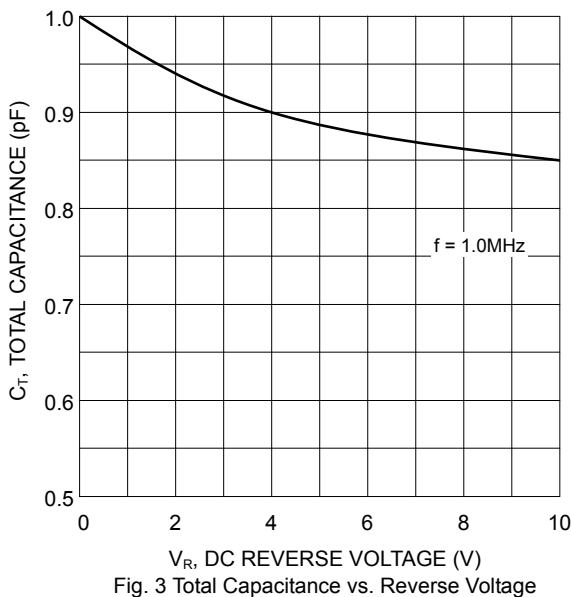
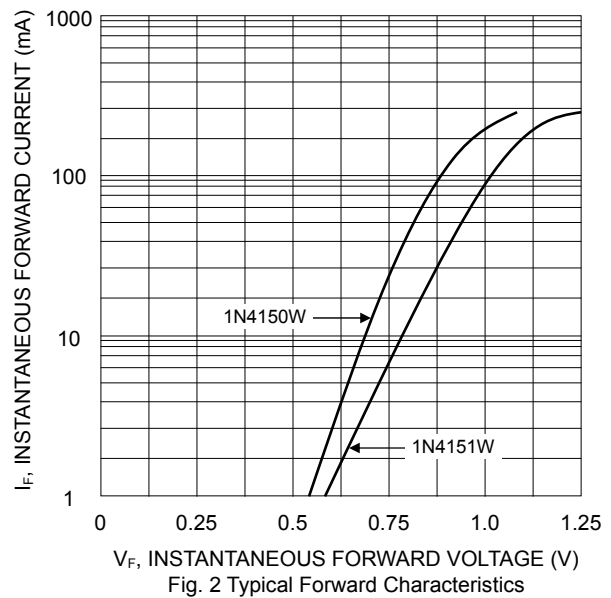
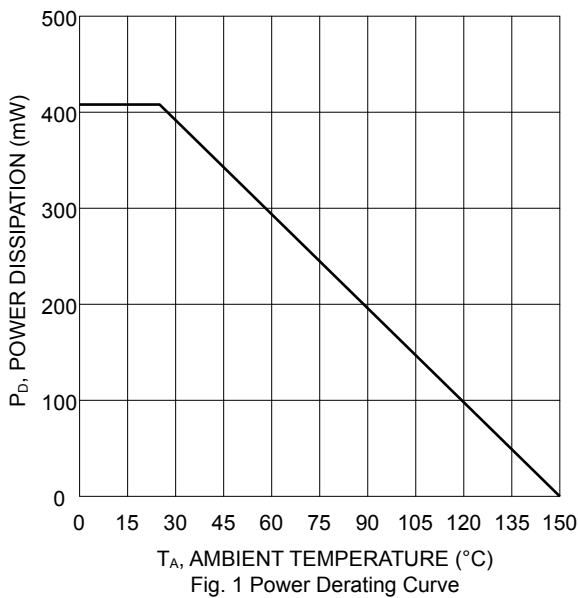
Thermal Characteristics

Characteristic	Symbol	1N4150W	1N4151W	Unit
Power Dissipation (Note 1)	P_D	410		mW
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	375	450	K/W

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

Characteristic	Symbol	1N4150W	1N4151W	Unit
Forward Voltage Drop (Note 2)	V_{FM}	1.0		V
Peak Reverse Leakage Current @ $V_R = 50\text{V}$	I_{RM}	100	50	nA
Diode Capacitance ($V_R = 0\text{V}$, $f = 1.0\text{MHz}$)	C_D	2.5	2.0	pF
Reverse Recovery Time (Note 3)	t_{rr}	4.0	2.0	nS

Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.
 2. 1N4150W: Measured with $I_F = 200\text{mA}$. 1N4151W: Measured with $I_F = 50\text{mA}$.
 3. Measured with $I_F=10\text{mA}$, $V_R=6.0\text{V}$, $I_{RR}=1.0\text{mA}$, $R_L=100\Omega$.



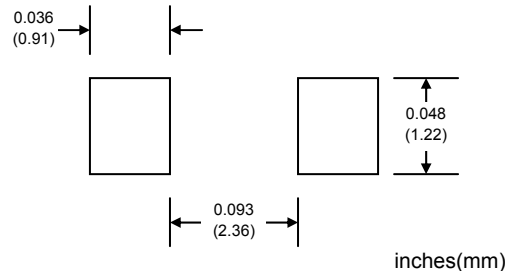
MARKING INFORMATION



xx = Device Code, See Table Below

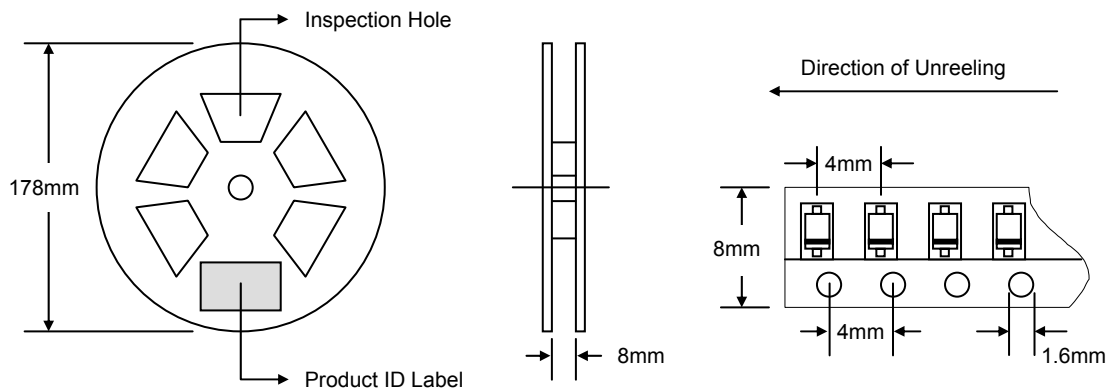
Type No.	Device Code
1N4150W	A4
1N4151W	A5

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
1N4150W-T1	SOD-123	3000/Tape & Reel
1N4151W-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, 1N4150W-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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