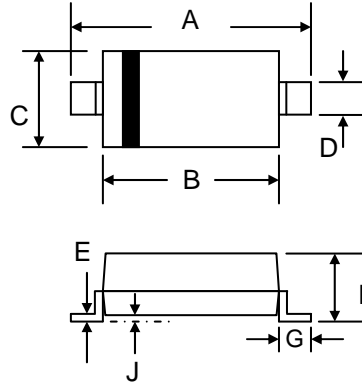


Features

- Low Forward Voltage
- Fast Switching Speed
- PN Junction Guard Ring for Transient and ESD Protection
- 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	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current (Note 1) @ $T_L = 90^\circ\text{C}$	I_F	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30	A
Thermal Resistance, Junction to Lead (Note 2)	R_{JL}	26	$^\circ\text{C}/\text{W}$
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	82	
Operating Temperature Range	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

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

Characteristic	Symbol	Value	Unit
Maximum Forward Voltage Drop @ $I_F = 0.1\text{A}$ @ $I_F = 1.0\text{A}$ @ $I_F = 3.0\text{A}$	V_{FM}	0.36 0.55 0.85	V
Peak Reverse Current @ $T_J = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J = 85^\circ\text{C}$	I_{RM}	500 25	μA mA

Note: 1. Mounted on FR-4 PCB with 645mm^2 pad size.
2. Mounted on FR-4 PCB with minimum recommended pad size.

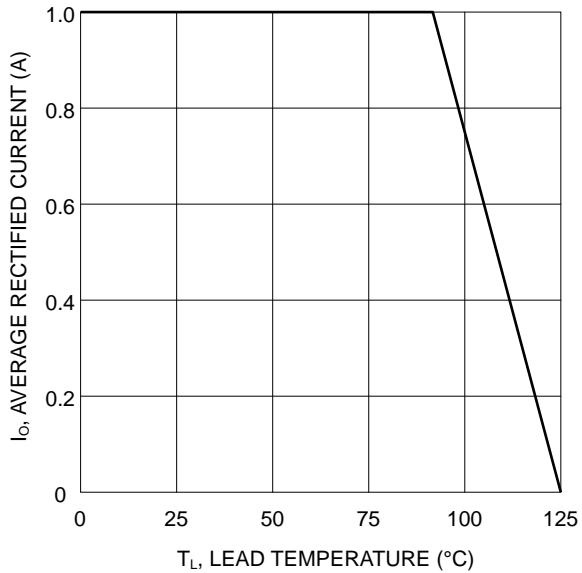


Fig. 1 Forward Current Derating Curve

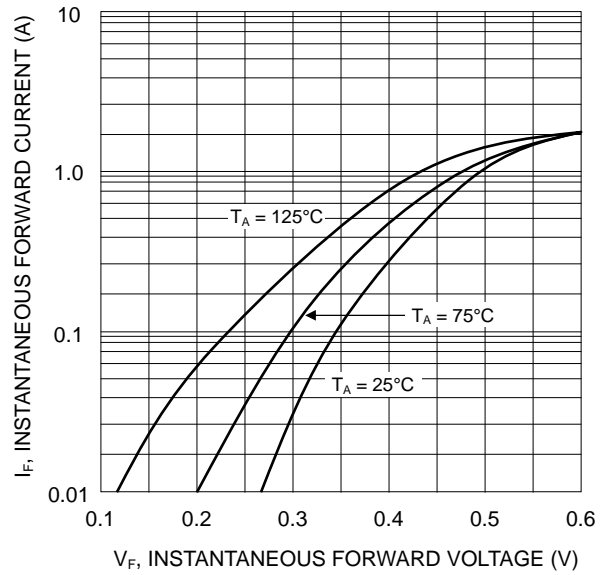


Fig. 2 Typical Forward Characteristics

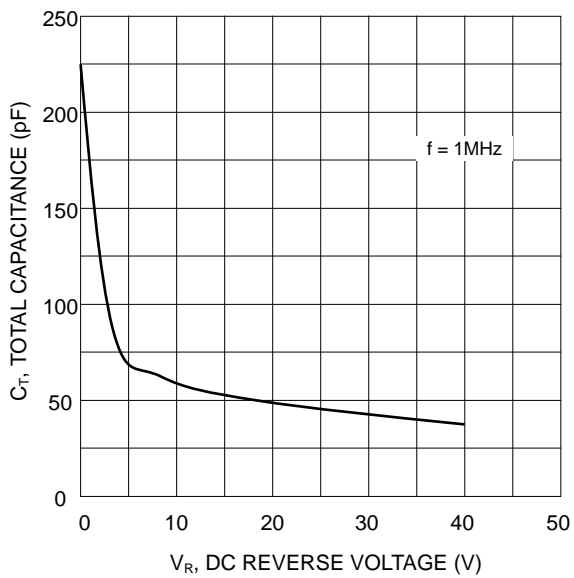


Fig. 3 Total Capacitance vs. Reverse Voltage

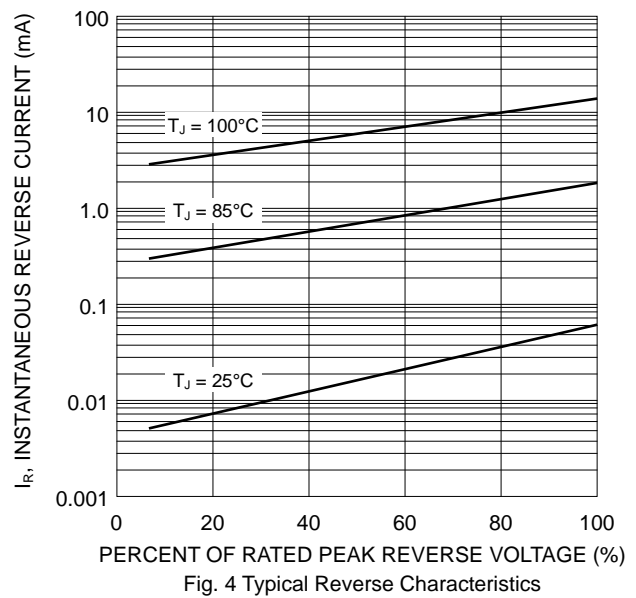


Fig. 4 Typical Reverse Characteristics

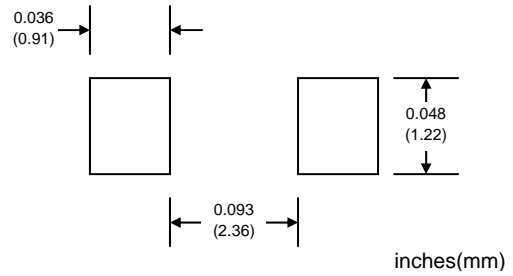
MARKING INFORMATION



xx = Device Code, See Table Below

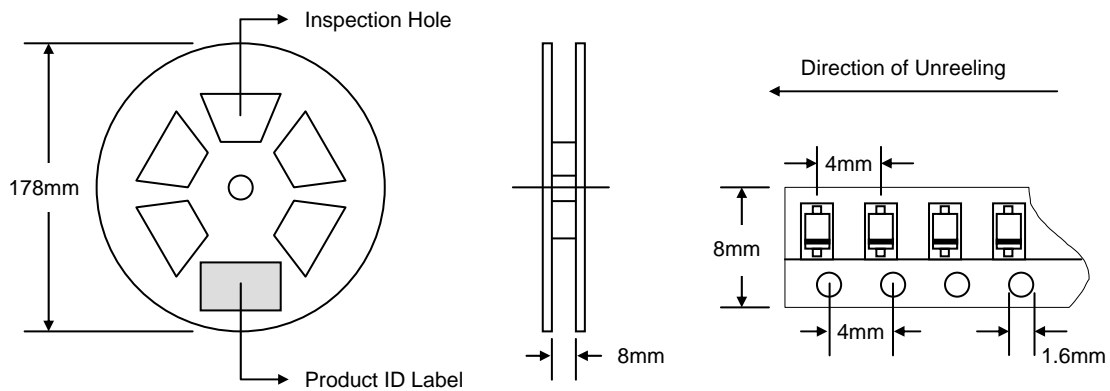
Mfg Site	Device Code
TW Plant	G5
CN Plant	SL

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
SS1040-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, SS1040-T1-LF.**

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