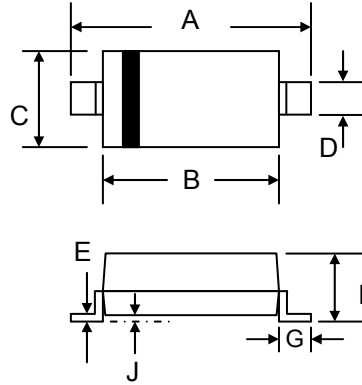


Features

- 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	0.50	0.70
E	—	0.20
G	0.25	—
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: JS
- **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}	250	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	625	mA
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

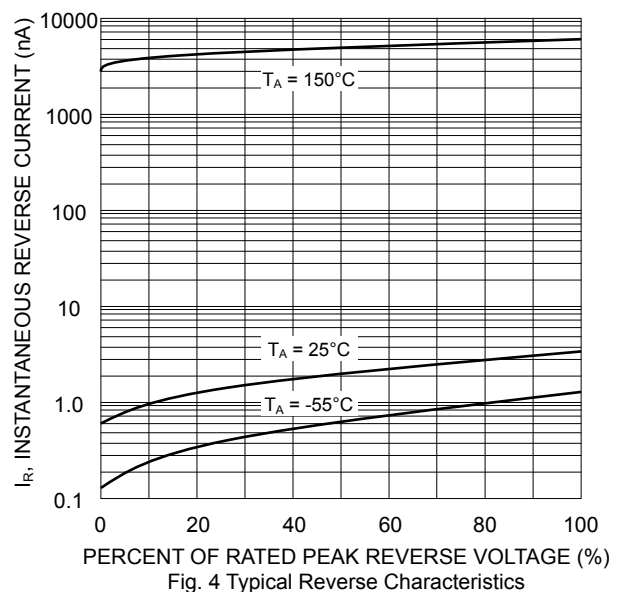
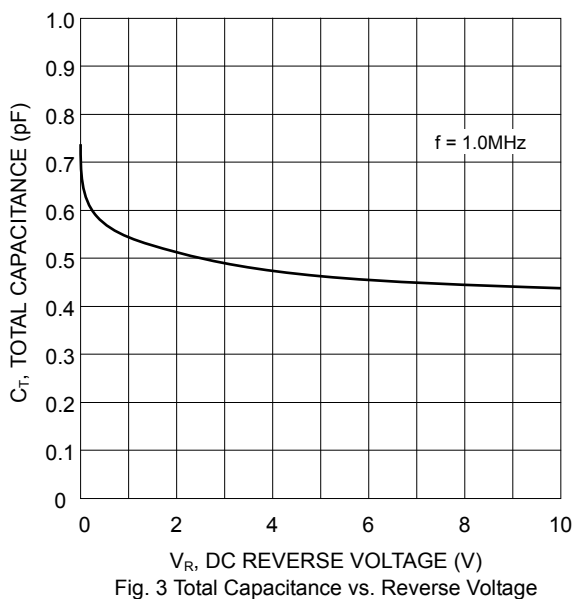
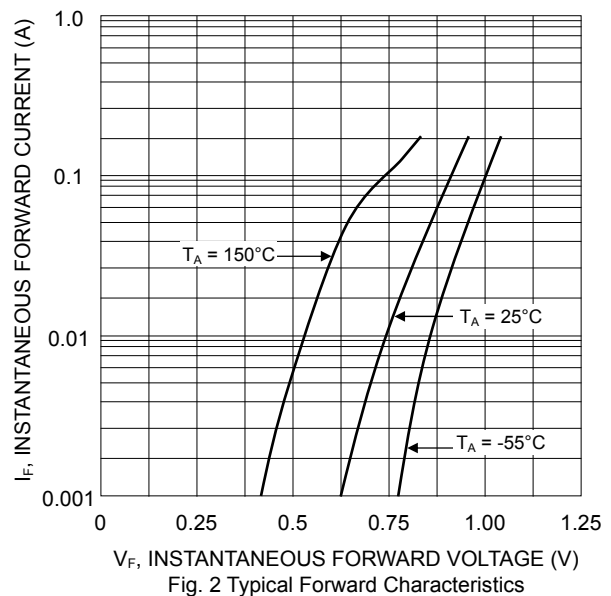
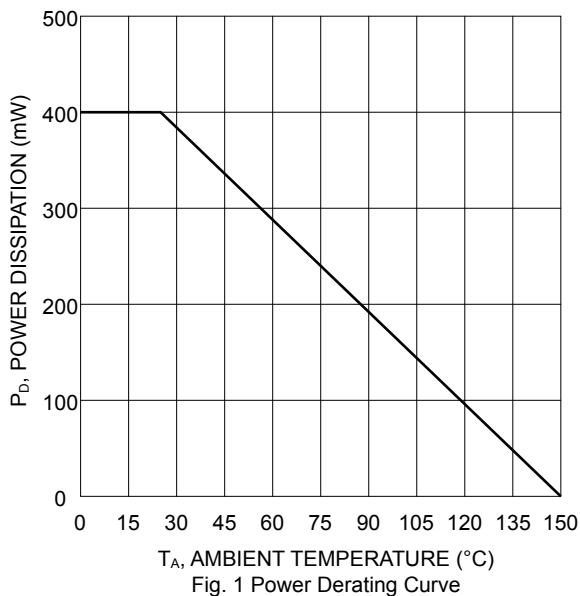
Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	P_D	400	mW
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	492	$^\circ\text{C}/\text{W}$
Thermal Resistance, Junction to Lead (Note 1)	R_{JL}	174	$^\circ\text{C}/\text{W}$

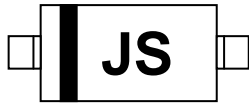
Note: 1. Mounted on FR-5 PC board with 25.4 x 25.4mm copper pads.

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

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage @ $I_R = 100\mu\text{A}$	$V_{(BR)}$	250			V
Forward Voltage Drop @ $I_F = 100\text{mA}$ @ $I_F = 200\text{mA}$	V_{FM}			1.0 1.25	V
Peak Reverse Leakage Current @ $V_R = 200\text{V}, T_A = 25^\circ\text{C}$ @ $V_R = 200\text{V}, T_A = 150^\circ\text{C}$	I_{RM}			1.0 100	μA
Diode Capacitance ($V_R = 0\text{V}, f = 1.0\text{MHz}$)	C_D			5.0	pF
Reverse Recovery Time ($I_F = I_R = 30\text{mA}, R_L = 100\Omega$)	t_{rr}			50	nS

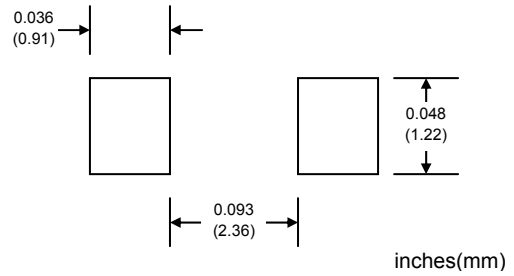


MARKING INFORMATION



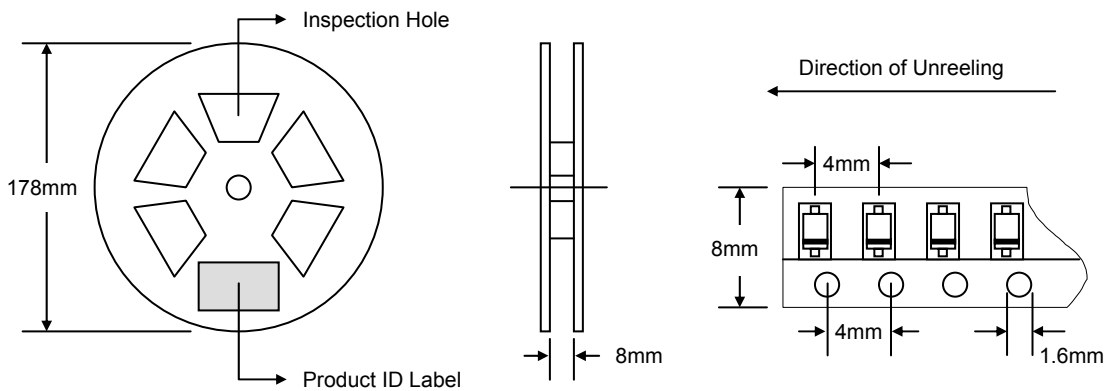
Cathode = Polarity Band
JS = Device Code

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
MMSD103-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, MMSD103-T1-LF.**

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