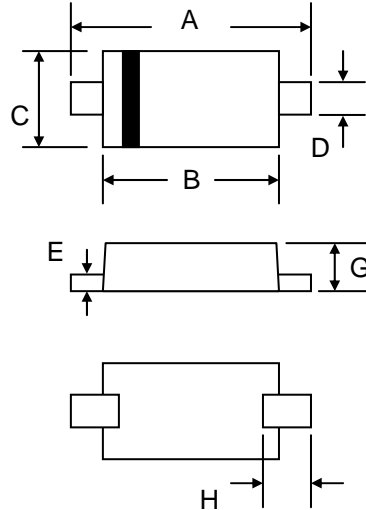


Features

- **Low Profile 1.08mm Max. Case Height**
- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automatic Assembly
- Plastic Material – UL Recognition Flammability Classification 94V-0



SOD-123FL		
Dim	Min	Max
A	3.30	3.70
B	2.60	2.95
C	1.65	1.95
D	0.75	1.35
E	0.10	0.20
G	0.98	1.08
H	0.50	0.80
All Dimensions in mm		

Mechanical Data

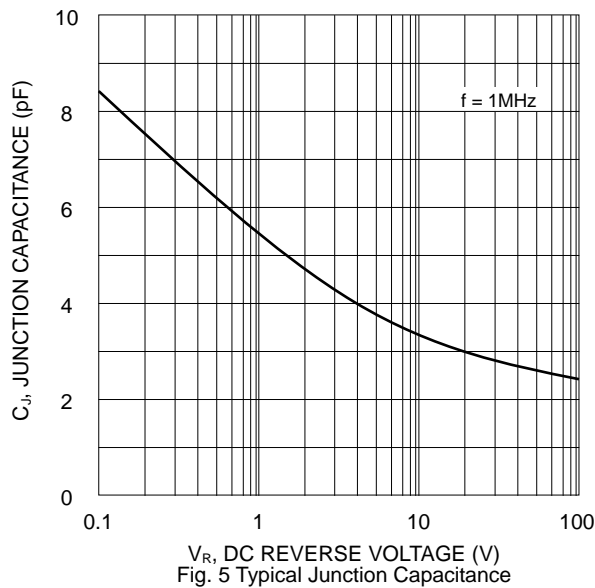
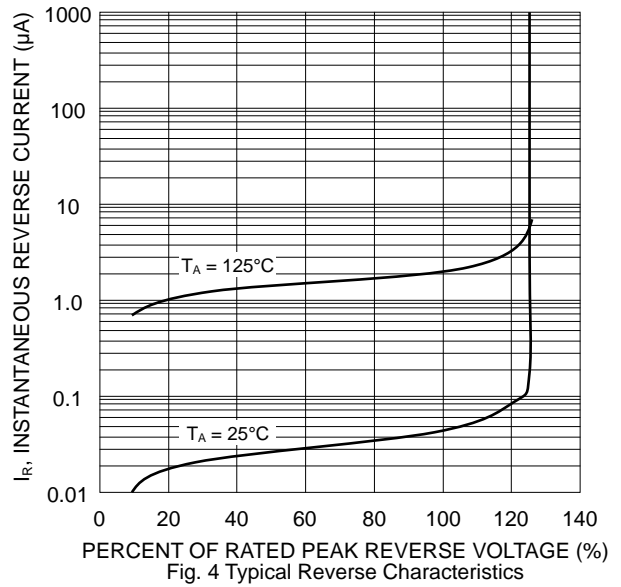
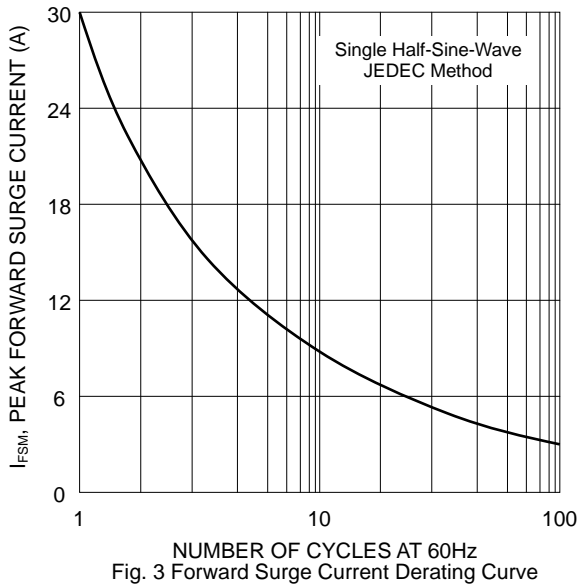
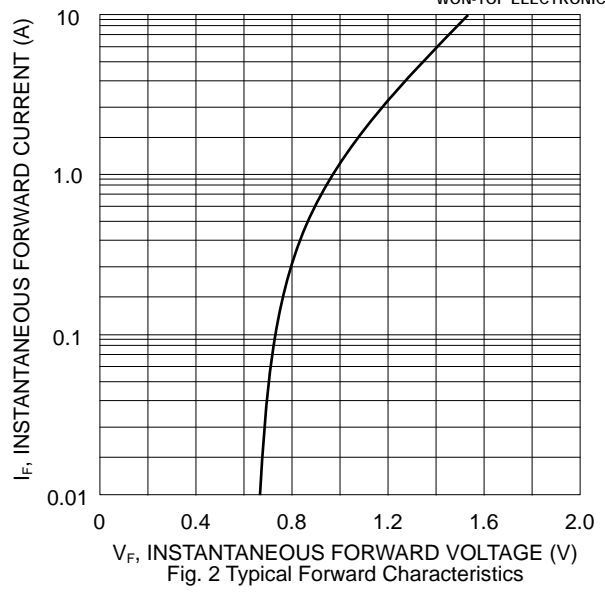
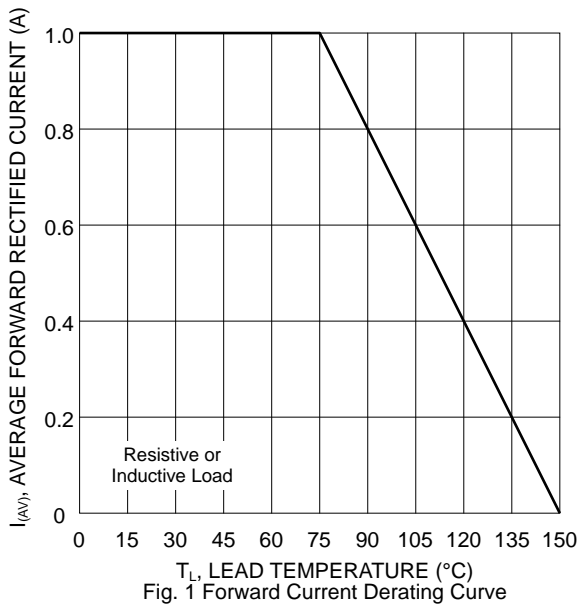
- Case: SOD-123FL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.017 grams (approx.)
- Marking: Device Code, See Page 3
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

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

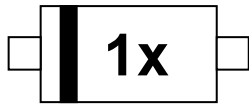
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GS 1000FL	GS 1001FL	GS 1002FL	GS 1004FL	GS 1006FL	GS 1008FL	GS 1010FL	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$	I_O	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
Forward Voltage @ $I_F = 1.0\text{A}$	V_{FM}	1.10							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}	1.0 50							μA
Typical Junction Capacitance (Note 1)	C_J	4.0							pF
Thermal Resistance Junction to Ambient (Note 2)	R_{JA}	325							$^\circ\text{C}/\text{W}$
Thermal Resistance Junction to Ambient (Note 3)	R_{JA}	82							
Thermal Resistance Junction to Lead (Note 2)	R_{JL}	26							
Thermal Resistance Junction to Lead (Note 3)	R_{JL}	21							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

- Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 2. Mounted on FR-4 P.C. Board with minimum recommended pad size.
 3. Mounted on FR-4 P.C. Board with 700mm² copper pads.

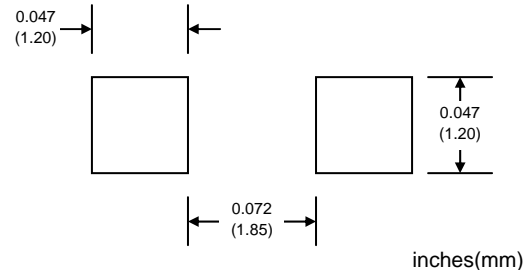


MARKING INFORMATION



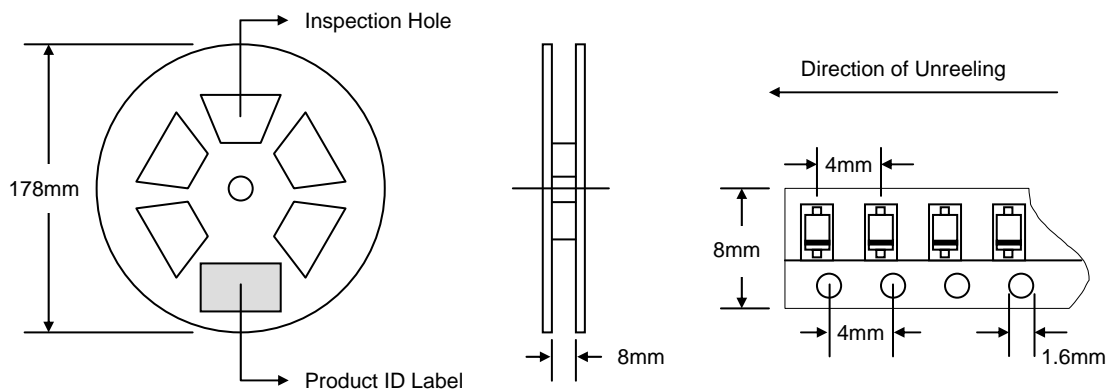
Cathode = Polarity Band
 1x = Device Code
 x = A (GS1000FL)
 B (GS1001FL)
 D (GS1002FL)
 G (GS1004FL)
 J (GS1006FL)
 K (GS1008FL)
 M (GS1010FL)

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	195 x 135 x 195	30,000	370 x 370 x 420	240,000	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
GS1000FL-T1	SDO-123FL	3000/Tape & Reel
GS1001FL-T1	SDO-123FL	3000/Tape & Reel
GS1002FL-T1	SDO-123FL	3000/Tape & Reel
GS1004FL-T1	SDO-123FL	3000/Tape & Reel
GS1006FL-T1	SDO-123FL	3000/Tape & Reel
GS1008FL-T1	SDO-123FL	3000/Tape & Reel
GS1010FL-T1	SDO-123FL	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, GS1000FL-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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We power your everyday.