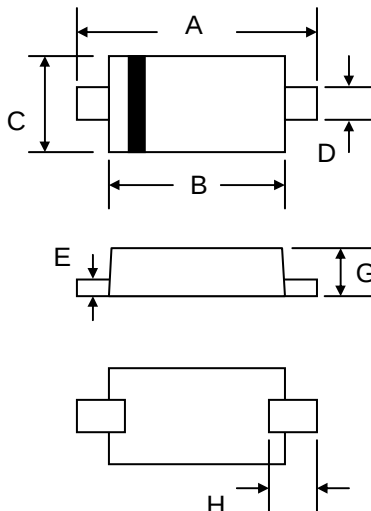


Features

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



SOD-123FL		
Dim	Min	Max
A	3.50	3.70
B	2.65	2.95
C	1.65	1.95
D	0.75	1.05
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°C unless otherwise specified

Characteristic	Symbol	GS1000 FL	GS1001 FL	GS1002 FL	GS1004 FL	GS1006 FL	GS1008 FL	GS1010 FL	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _L = 75°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 = 1.0A	V _{FM}	1.10							V
Peak Reverse Current @T _J = 25°C At Rated DC Blocking Voltage @T _J = 125°C	I _{RM}	1.0 50							μA
Reverse Recovery Time (Note 1)	t _{rr}	2.5							μs
Typical Junction Capacitance (Note 2)	C _j	4.0							pF
Typical Thermal Resistance (Note 3)	R _{θJA}	65							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-50 to +150							°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on P.C. Board with 6.0mm² land area.

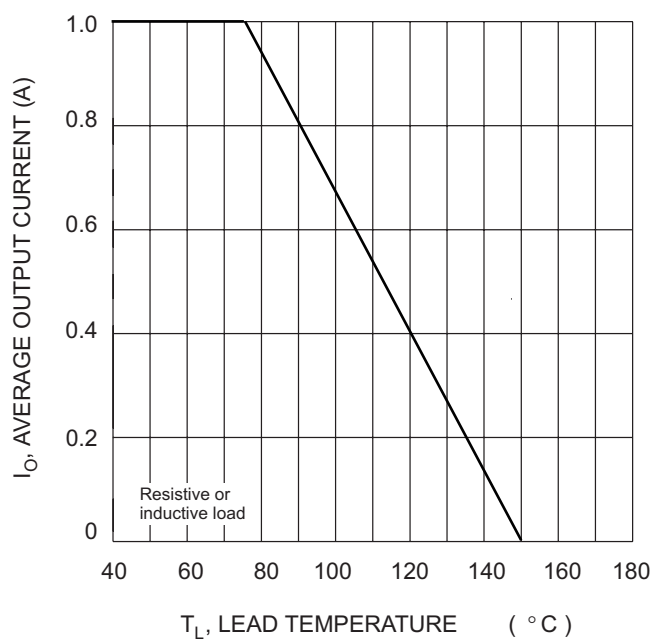


Fig. 1 Forward Current Derating Curve

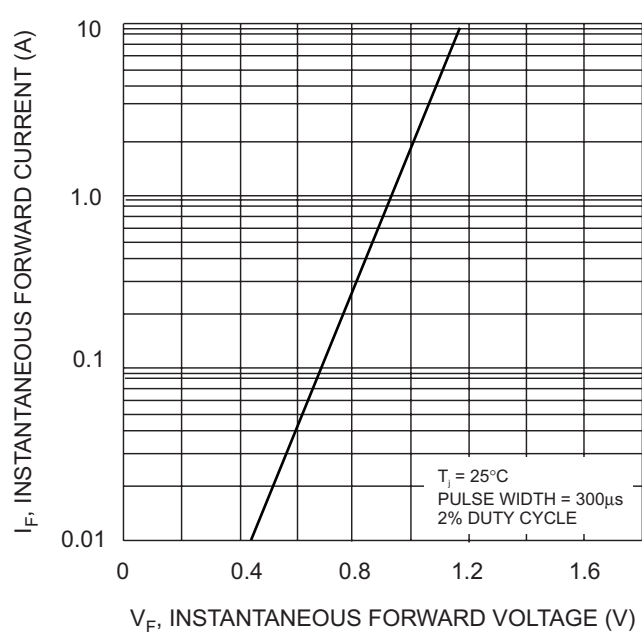


Fig. 2 Typical Forward Characteristics

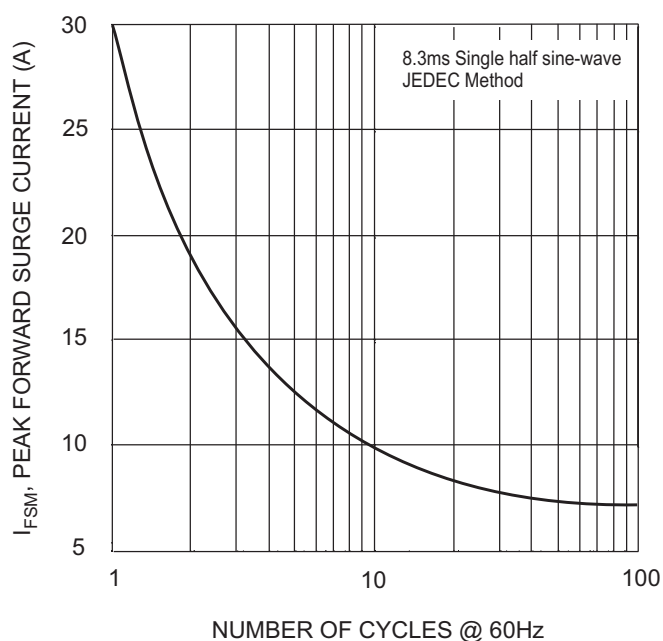


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

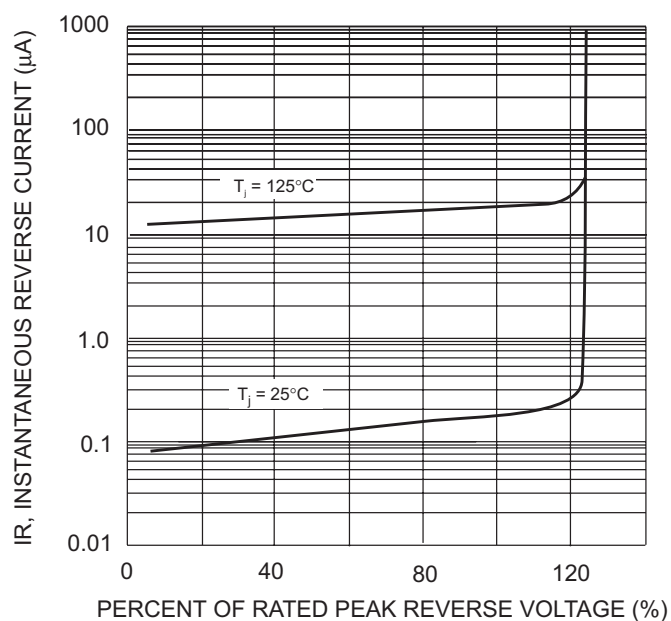
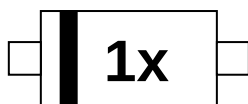


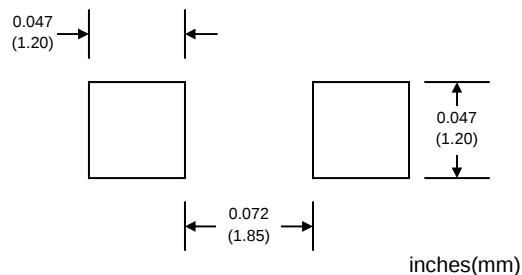
Fig. 4 Typical Reverse Characteristics

MARKING INFORMATION



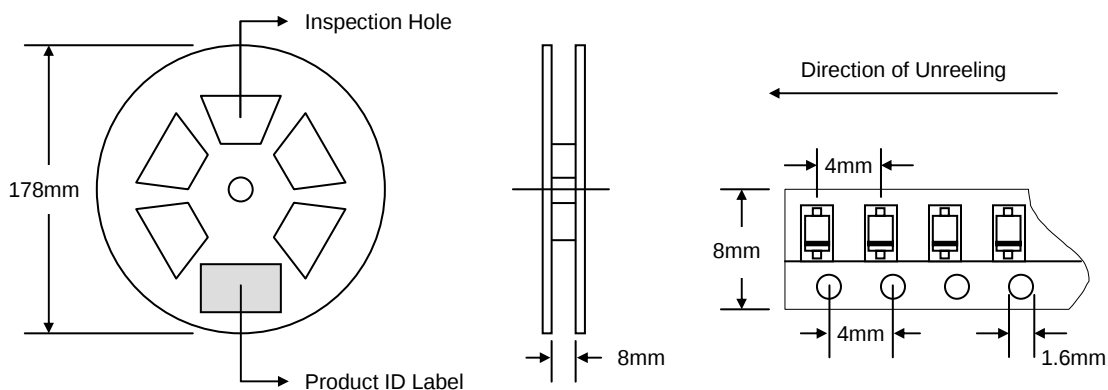
Cathode = Polarity Band
 1x = Device Code
 x = A (GS1000FL)
 B (GS1001FL)
 D (GS1002FL)
 G (GS1004FL)
 J (GS1006FL)
 K (GS1008FL)
 M (GS1010FL)

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	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
GS1000FL-T1	SOD-123FL	3000/Tape & Reel
GS1001FL-T1	SOD-123FL	3000/Tape & Reel
GS1002FL-T1	SOD-123FL	3000/Tape & Reel
GS1004FL-T1	SOD-123FL	3000/Tape & Reel
GS1006FL-T1	SOD-123FL	3000/Tape & Reel
GS1008FL-T1	SOD-123FL	3000/Tape & Reel
GS1010FL-T1	SOD-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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