WON-TOP ELECTRONICS

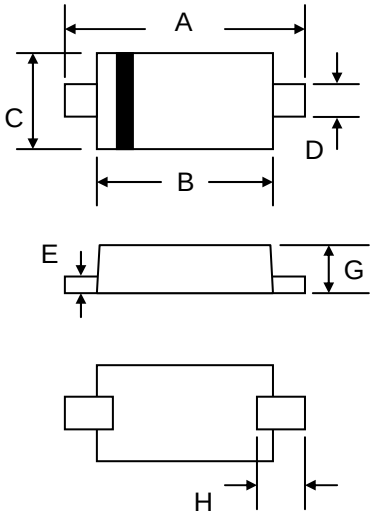
GS1000FL – GS1010FL

1.0A SURFACE MOUNT GLASS PASSIVATED STANDARD DIODE

RoHS Pb

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°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 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_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	1.0 50							μA
Typical Junction Capacitance (Note 1)	C_J	4.0							pF
Thermal Resistance Junction to Ambient (Note 2) Thermal Resistance Junction to Ambient (Note 3) Thermal Resistance Junction to Lead (Note 2) Thermal Resistance Junction to Lead (Note 3)	$R_{\theta JA}$ $R_{\theta JA}$ $R_{\theta JL}$ $R_{\theta JL}$	325 82 26 21							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°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 700mm^2 copper pads.

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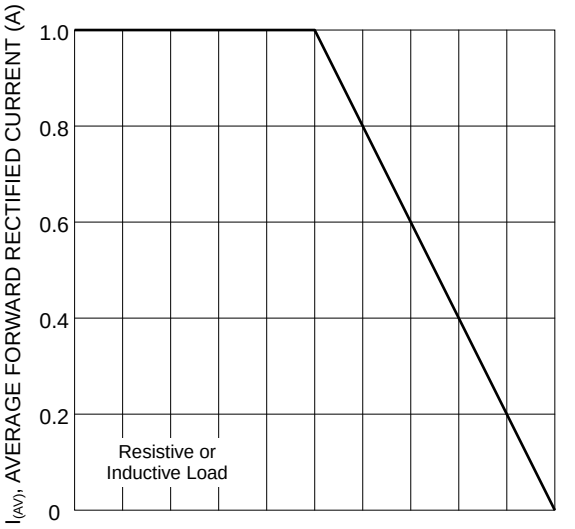


Fig. 1 Forward Current Derating Curve

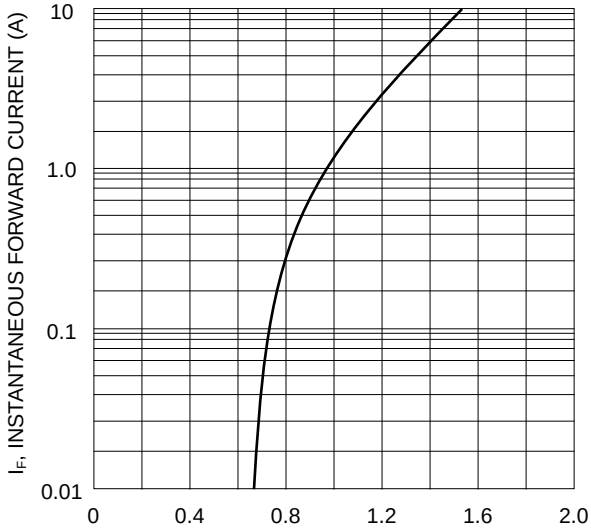


Fig. 2 Typical Forward Characteristics

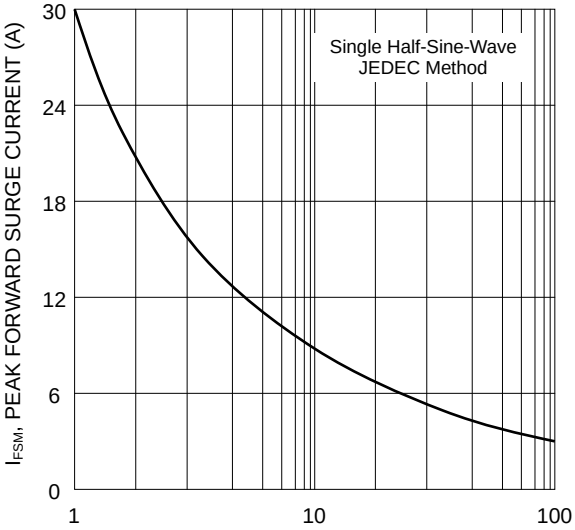


Fig. 3 Forward Surge Current Derating Curve

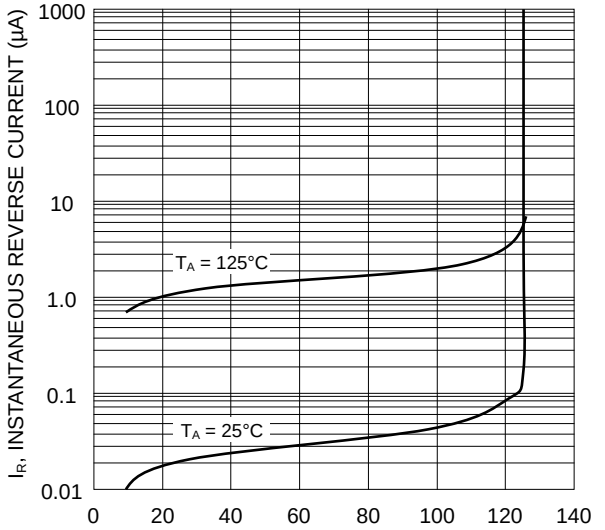


Fig. 4 Typical Reverse Characteristics

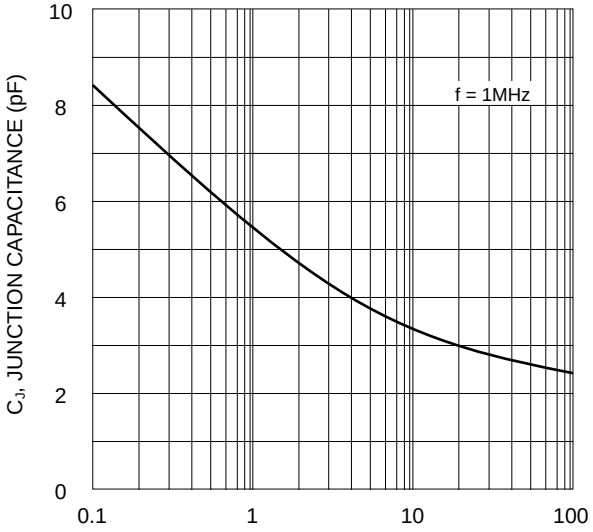
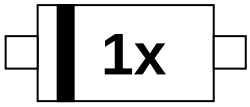


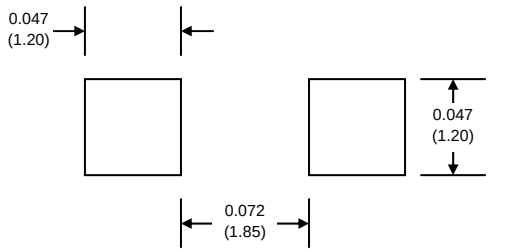
Fig. 5 Typical Junction Capacitance

MARKING INFORMATION



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

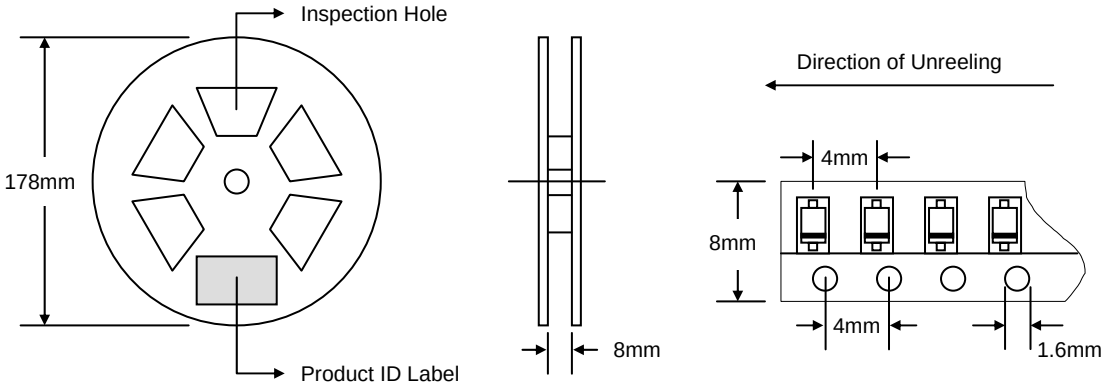
RECOMMENDED FOOTPRINT



inches(mm)

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.

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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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We power your everyday.