

SINLOON®
POWER SEMICONDUCTOR

S1A ~ S1M



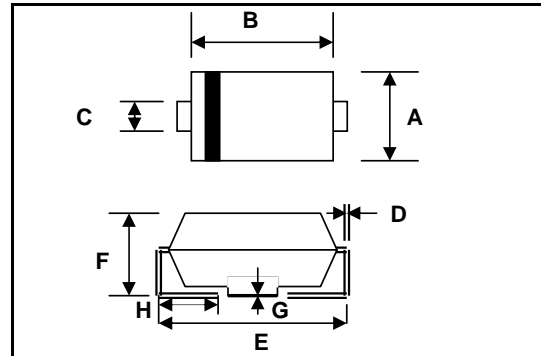
1.0A Surface Mount Glass Passivated Standard Diode

FEATURE

- ◆ Glass Passivated Die Construction
- ◆ Ideally Suited for Automatic Assembly
- ◆ Low Forward Voltage Drop
- ◆ Surge Overload Rating to 30A Peak
- ◆ Low Power Loss
- ◆ Built-in Strain Relief
- ◆ Plastic Case Material has UL Flammability Classification Rating 94V-O

MECHANICAL DATA

- ◆ Case: SMB/DO-214AA, Molded Plastic.
- ◆ Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- ◆ Polarity: Cathode Band or Cathode Notch
- ◆ Marking: Type Number
- ◆ Weight: 0.093 grams (approx)_
- ◆ Lead Free: For RoHS / Lead free Version, Add "LF" suffix to part Number, See page 3.



SMB/DO-214AA		
Dim.	Min.	Max.
A	3.30	3.94
B	4.06	4.70
C	1.91	2.11
D	0.152	0.305
E	5.08	5.59
F	2.13	2.44
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS @TA = 25°C unless otherwise specified

Characteristic	Symbol	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
Peak Repetitive Reverse Voltage	VRRM								
Working Peak Reverse Voltage	VRWM	50	100	200	400	600	800	1000	V
DC Blocking Voltage	VR								
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current @TL=100°C	IO	1.0							A
Non-Repetitive Peak Forward Surtge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30							A
Forward Voltage @IF=2.0A	VFM	1.10							V
Peak Reverse Current @TA=25°C	IRM	5.0							uA
At Rated DC Blocking Voltage @TA=125°C		200							
Reverse Recovery Time (Note 1)	Trr	2.5							uS
Typical Junction Capacitance (Note 2)	Ci	15							pF
Typical Thermal Resistance (Note 3)	RθJL	30							°C/W
Operating and Storage Temperature Range	TJ, TSTG	-55 to +150							°C

- Note:**
- 1). Measured with IF = 0.5A, IR=1.0A, Irr = 0.25A
 - 2). Measured at 1.0MHz and applied reverse voltage of 4.0V DC
 - 3). Mounted on P.C. Board with 8.0mm² land area.



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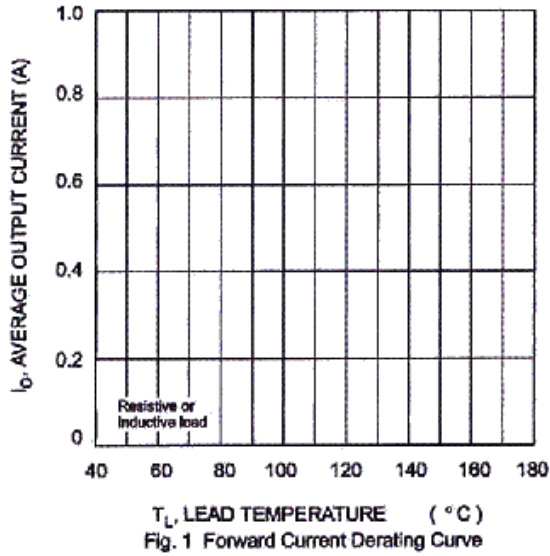


Fig. 1 Forward Current Derating Curve

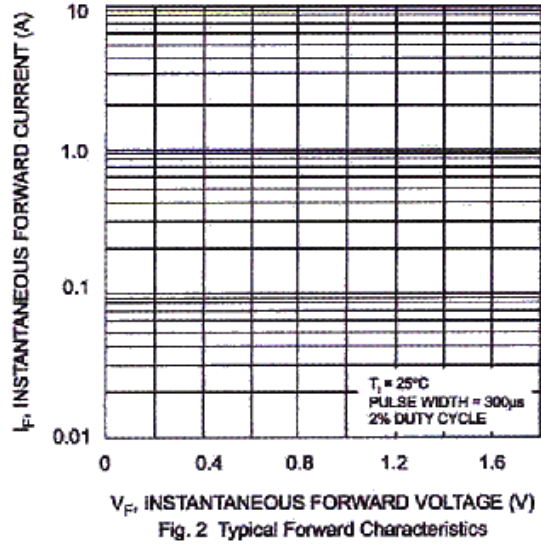


Fig. 2 Typical Forward Characteristics

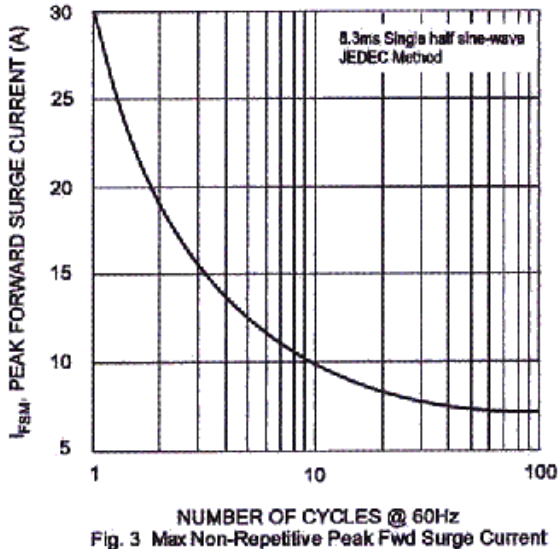


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

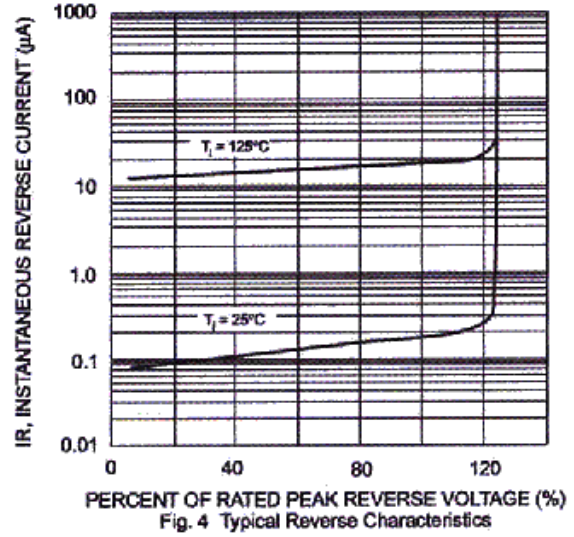


Fig. 4 Typical Reverse Characteristics



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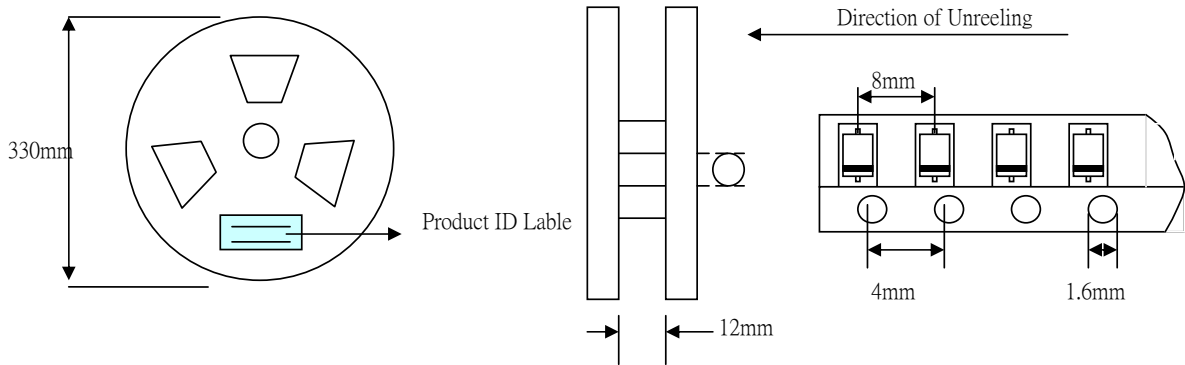


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MARKING INFORMATION

<p>Cathode = Polarity Band WTE = Manufacture Logo S1x = Device Code, See Page 2 X = A,B,D,G,J,K or M (50V ~ 1KV)</p>	<p>RECOMMENDED FOOTPRINT</p> <p style="text-align: center;">Inches (mm)</p>
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MARKING INFORMATION



Reel Diameter (mm)	Quantity (PCS)	Inner box Size LxWxH (mm)	Quantity (PCS)	Carton Size LxWxH (mm)	Quantity (PCS)	Approx Gross Weight (KG)
330	3000	340x337x45	6000	370x370x420	48000	14.0

- Note: 1). Paper reel, white or gray color.
2). Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
S1A-T3	SMB	3000/Tape & Reel
S1B-T3	SMB	3000/Tape & Reel
S1D-T3	SMB	3000/Tape & Reel
S1G-T3	SMB	3000/Tape & Reel
S1J-T3	SMB	3000/Tape & Reel
S1T-T3	SMB	3000/Tape & Reel
S1M-T3	SMB	3000/Tape & Reel

- 1). Shipping quantity given in 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, S1A-T3-LF.