

SINLOON®
POWER SEMICONDUCTOR

S3A ~ S3M



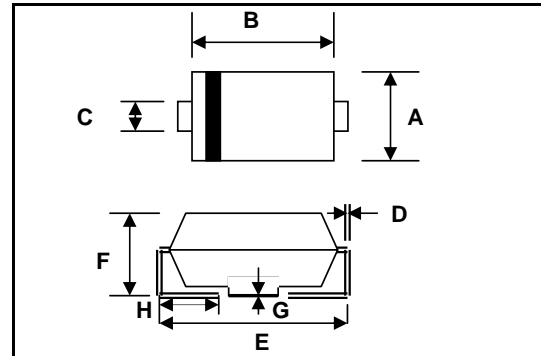
3.0A Surface Mount Glass Passivated Standard Diode

FEATURE

- ◆ Glass Passivated Die Construction
- ◆ Ideally Suited for Automatic Assembly
- ◆ Low Forward Voltage Drop
- ◆ Surge Overload Rating to 100A Peak
- ◆ Low Power Loss
- ◆ Built-in Strain Relief
- ◆ Plastic Case Material has UL Flammability Classification Rating 94V-O

MECHANICAL DATA

- ◆ Case: SMC/DO-214AB, Molded Plastic.
- ◆ Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- ◆ Polarity: Cathode Band or Cathode Notch
- ◆ Marking: Type Number
- ◆ Weight: 0.21 grams (approx)_
- ◆ Lead Free: For RoHS / Lead free Version, Add "LF" suffix to part Number, See page 3.

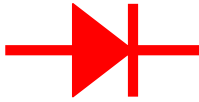


SMC/DO-214AB		
Dim.	Min.	Max.
A	5.59	6.22
B	6.60	7.11
C	2.75	3.25
D	0.152	0.305
E	7.75	8.13
F	2.00	2.62
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

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

Characteristic	Symbol	S3A	S3B	S3D	S3G	S3J	S3K	S3M	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	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100							A
Forward Voltage @IF=2.0A	VFM	1.20							V
Peak Reverse Current @TA=25°C	IRM	5.0							uA
At Rated DC Blocking Voltage @TA=125°C		250							
Reverse Recovery Time (Note 1)	Trr	2.5							uS
Typical Junction Capacitance (Note 2)	Ci	60							pF
Typical Thermal Resistance (Note 3)	RθJL	13							°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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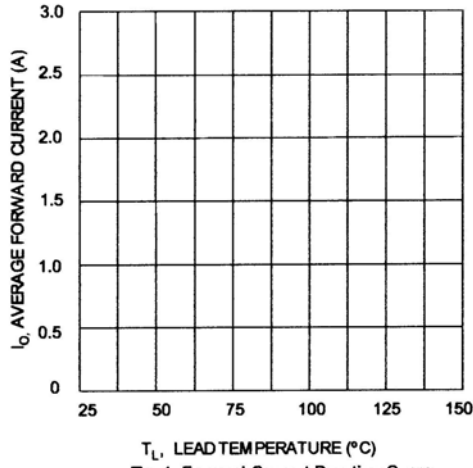


Fig. 1 Forward Current Derating Curve

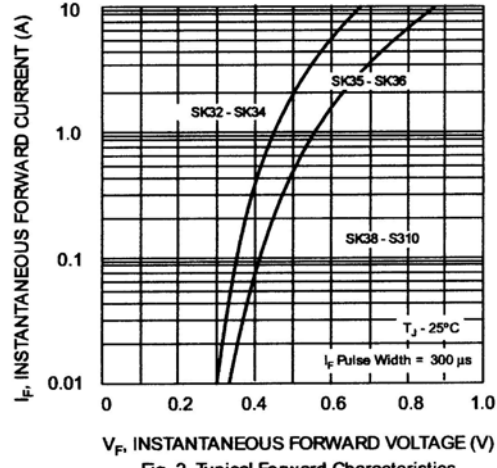


Fig. 2 Typical Forward Characteristics

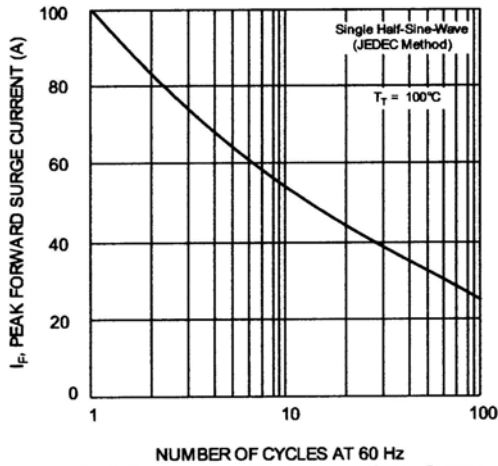


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

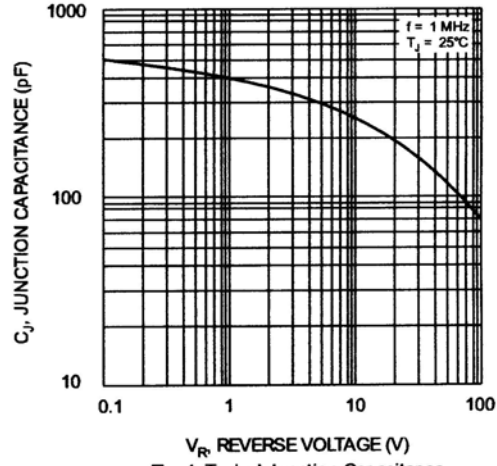


Fig. 4 Typical Junction Capacitance

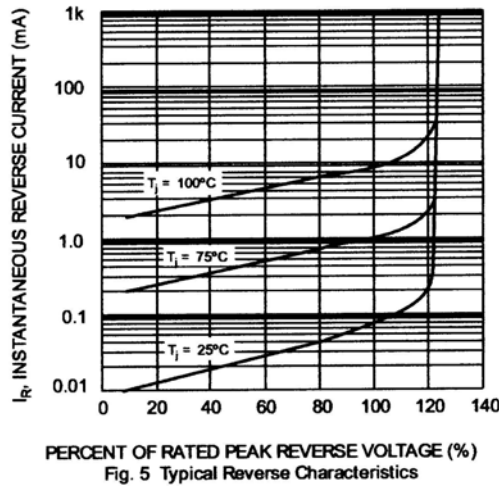
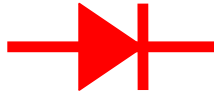


Fig. 5 Typical Reverse Characteristics



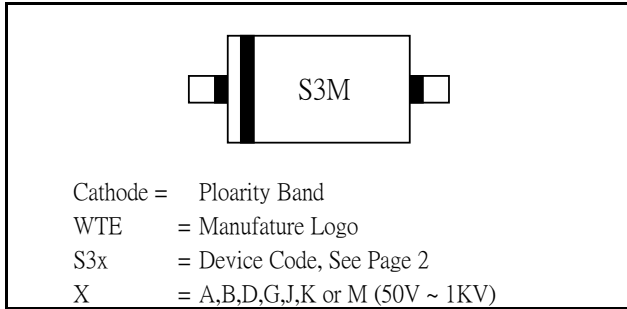
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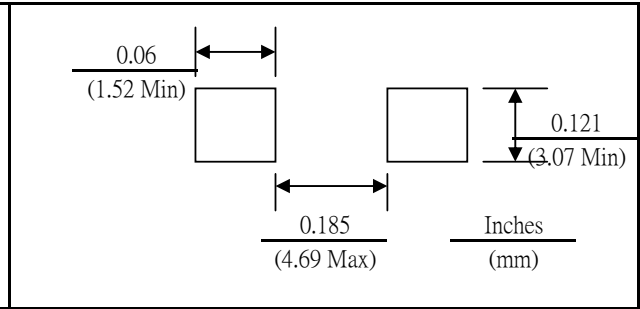


3.0A Surface Mount Glass Passivated Standard Diode

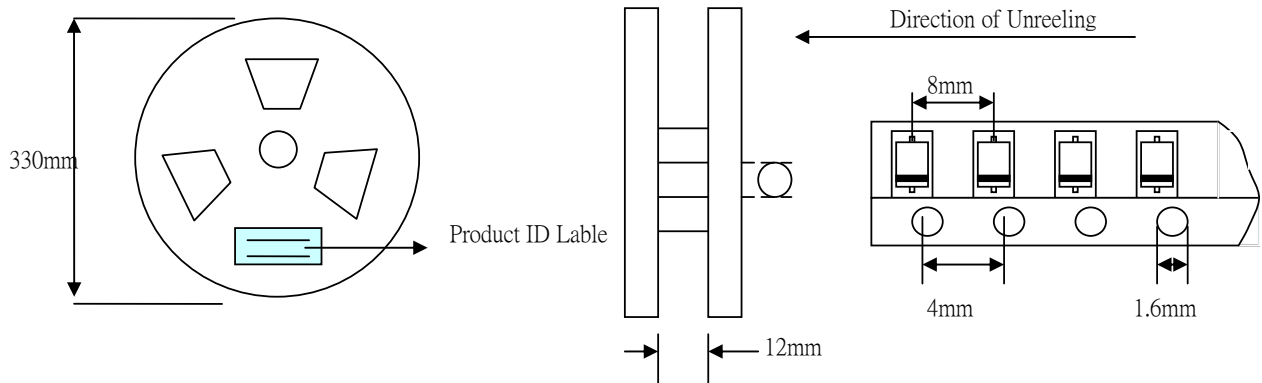
MARKING INFORMATION



RECOMMENDED FOOTPRINT



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	19.0

- 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
S3A-T3	SMC	3000/Tape & Reel
S3B-T3	SMC	3000/Tape & Reel
S3D-T3	SMC	3000/Tape & Reel
S3G-T3	SMC	3000/Tape & Reel
S3J-T3	SMC	3000/Tape & Reel
S3K-T3	SMC	3000/Tape & Reel
S3M-T3	SMC	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, S3A-T3-LF.