

Technical Data Data Sheet N0564, Rev. B **Green Products** 

## S3A THRU S3M

#### **SURFACE MOUNT GENERAL RECTIFIER**

#### Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 Amperes

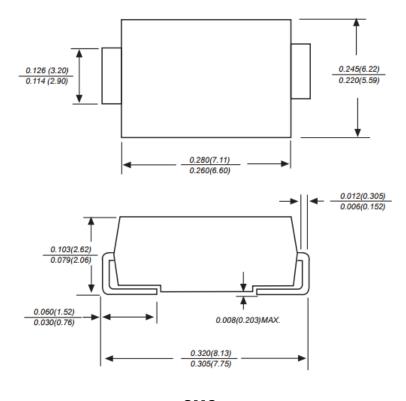
#### Features:

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- · Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- · Additional testing can be offered upon request

#### **Mechanical Data:**

- Case: JEDEC DO-214AB molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- · Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.007 ounce, 0.25grams

#### Mechanical Dimensions: In Inches/mm



SMC

- China Germany Korea Singapore United States
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## **Marking Diagram:**



Where XXXXX is YYWWL

 S3A
 = Part Name

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL: 94V-0

## **Ordering Information**

Device	Package	Shipping
S3A THRU S3M	SMC(DO-214AB) (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Unit
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	$V_{RRM} \ V_{DC}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum average forward rectified current @T <sub>L</sub> = 110°C	I <sub>(AV)</sub>	3.0							Α
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	100.0							Α
Maximum instantaneous forward voltage at 3.0A	$V_{F}$	1.1							V
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^{\circ}$ C $T_A = 100^{\circ}$ C	DC reverse current $@T_A = 25^{\circ}C$ $U_R$					μΑ			
Typical Junction Capacitance (Note 1)	CJ	60.0							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50.0							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

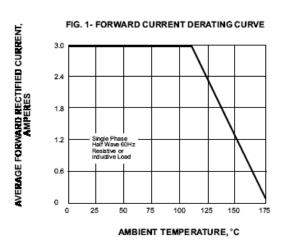
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas.

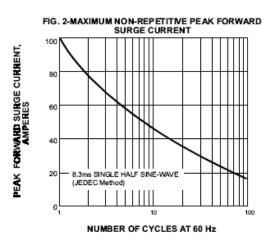
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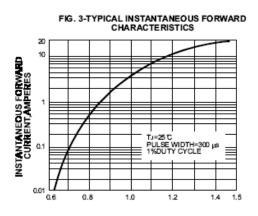


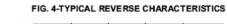
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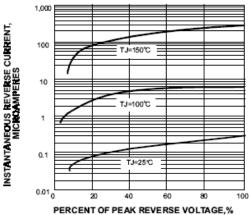
## RATINGS AND CHARACTERISTIC CURVES S3A THRU S3M



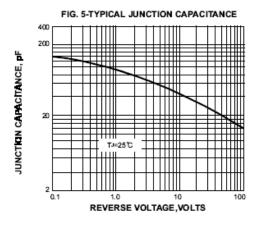


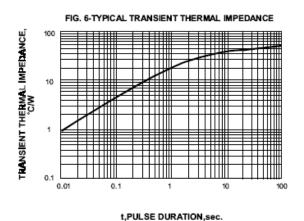












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