

## **SURFACE MOUNT SILICON RECTIFIER DIODES**

VOLTAGE RANGE: 50 - 1000V CURRENT: 3.0 A

## **Features**

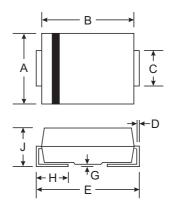
- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability
  Classification Rating 94V-O

## **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.)







SMC/DO-214AB							
Dim	Min	Max					
Α	5.59	6.22					
В	6.60	7.11					
С	2.75	3.18					
D	0.15	0.31					
E	7.75	8.13					
G	0.10	0.20					
Н	0.76	1.52					
J	2.00	2.62					
All Dimensions in mm							

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

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		Symbol	GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current	@T <sub>L</sub> = 75°C	lo	3.0						Α	
Non-Repetitive Peak Forward Surge 8.3ms Single half sine-wave superir rated load (JEDEC Method)		IFSM	100						А	
Forward Voltage	@I <sub>F</sub> = 3.0A	VFM	1.20							V
	@T <sub>A</sub> = 25°C @T <sub>A</sub> = 125°C	Irm	5.0 250						μΑ	
Reverse Recovery Time (Note 1)		trr				2.5				μS
Typical Junction Capacitance (Note	2)	Cj				60				pF
Typical Thermal Resistance (Note 3	)	$R_{ heta}JL$				13				°C/W
Operating and Storage Temperature Range		Тj, Tsтg	-65 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 8.0mm2 land area.



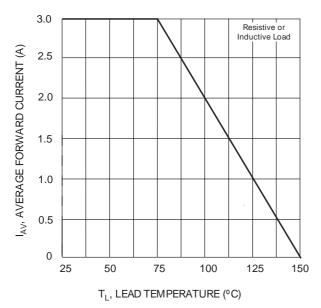


Fig. 1 Forward Current Derating Curve

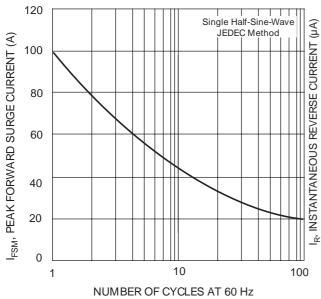


Fig. 3 Forward Surge Current Derating Curve

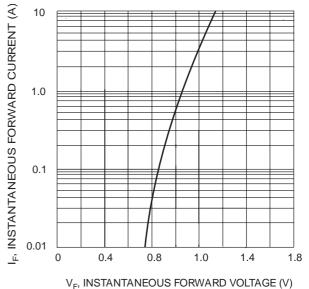


Fig. 2 Typical Forward Characteristics

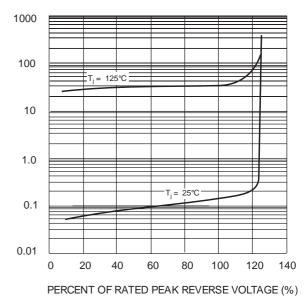


Fig. 4 Typical Reverse Characteristics