

# GS213B thru GS220B

Surface Mount General Purpose Rectifiers  
 Reverse Voltage 1300V to 2000V Forward Current 2A

## Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



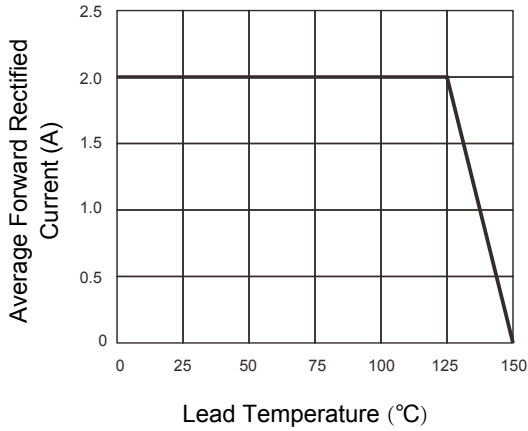
DO-214AA (SMB)

## Absolute Maximum Ratings and Electrical Characteristics

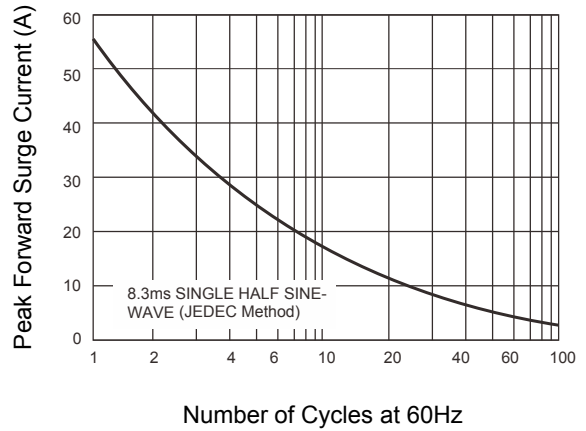
(Ratings at 25°C ambient temperature unless otherwise specified, Single phase ,half wave 60Hz, resistive or inductive load. For capacitive load, derated by 20%.)

Parameter	Symbol	GS213B	GS216B	GS218B	GS220B	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1300	1600	1800	2000	V
Maximum RMS Voltage	$V_{RMS}$	910	1120	1260	1400	V
Maximum DC Blocking Voltage	$V_{DC}$	1300	1600	1800	2000	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	2.0				A
Peak Forward Surge Current (8.3ms Half Sine-wave Superimposed on Rated Load (JEDEC method))	$I_{FSM}$	55				A
Maximum Instantaneous Forward Voltage at 2.0A	$V_F$	1.2				V
Maximum Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}C$	$I_R$	5			uA
	$T_A=125^{\circ}C$		100			
Typical Thermal Resistance	$R_{\theta JA}$	50				°C/W
	$R_{\theta JL}$	20				
Junction Temperature	$T_J$	-55 to +150				°C
Storage Temperature	$T_{STG}$	-55 to +150				°C

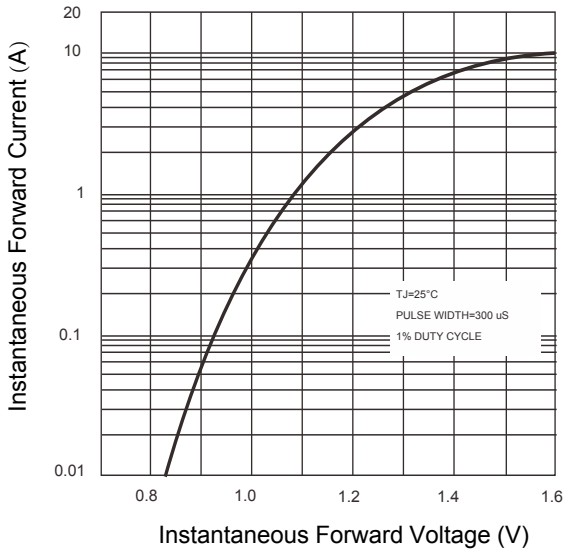
## Ratings and Characteristic Curves



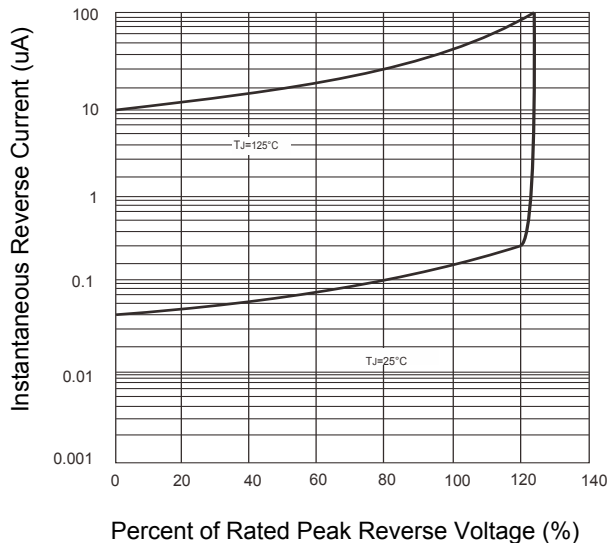
**Figure 1. Forward Current Derating Curve**



**Figure 2. Maximum Non-Repetitive Peak Forward Surge Current**



**Figure 3. Typical Instantaneous Forward Characteristics**

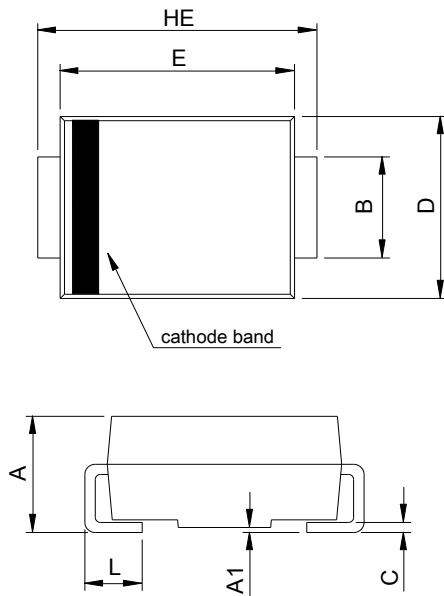


**Figure 4. Typical Reverse Leakage Characteristics**

# GS213B thru GS220B

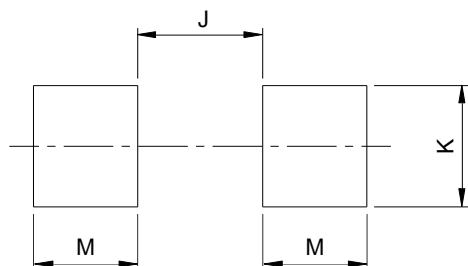
Surface Mount General Purpose Rectifiers  
 Reverse Voltage 1300V to 2000V Forward Current 2A

## Package Outline Dimensions DO-214AA (SMB)



SMB (DO-214AA)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.95	2.65	0.077	0.104
A1	0.00	0.20	0.000	0.008
B	1.91	2.20	0.075	0.087
C	0.10	0.31	0.004	0.012
D	3.30	3.95	0.130	0.156
E	4.06	4.90	0.160	0.193
HE	5.00	5.60	0.197	0.220
L	0.76	1.60	0.030	0.063

## Recommended Pad Layout



Recommended Pad Layout (Reference ONLY)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	-	2.60	-	0.102
K	2.20	-	0.087	-
M	1.80	-	0.071	-

## Ordering information

Device	Package	Marking	Quantity	HSF Status
GS213B	SMB	S213B	3,000pcs / Reel	RoHS Compliant
GS216B	SMB	S216B	3,000pcs / Reel	RoHS Compliant
GS218B	SMB	S218B	3,000pcs / Reel	RoHS Compliant
GS220B	SMB	S220B	3,000pcs / Reel	RoHS Compliant

For more information, please contact us at: [inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)