

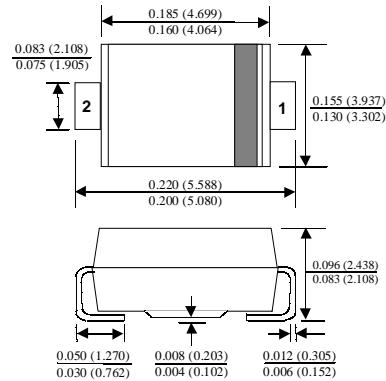
## S2A - S2M

### Features

- Easy pick and place.
- Low forward Voltage Drop.
- High Current Capability.
- High Surge Current Capability.



**SMB/DO-214AA**  
COLOR BAND DENOTES CATHODE



## 1.5 Ampere Glass Passivated Rectifiers

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$I_O$	Average Rectified Current @ $T_A = 100^\circ\text{C}$	1.5	A
$i_{f(\text{surge})}$	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	50	A
$P_D$	Total Device Dissipation Derate above $25^\circ\text{C}$	2.35 18.8	W mW/ $^\circ\text{C}$
$R_{\theta JC}$	Thermal Resistance, Junction to Case **	16	$^\circ\text{C}/\text{W}$
$T_{\text{stg}}$	Storage Temperature Range	-65 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-65 to +150	$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

\*\* Device mounted on FR-4 PCB 0.013 mm.

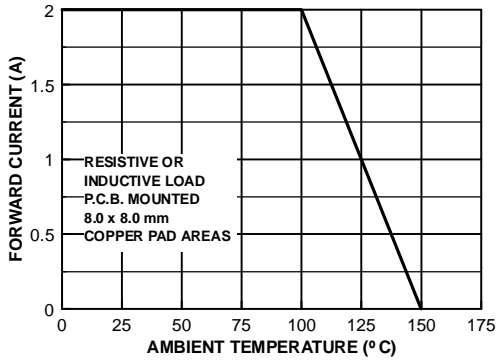
### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

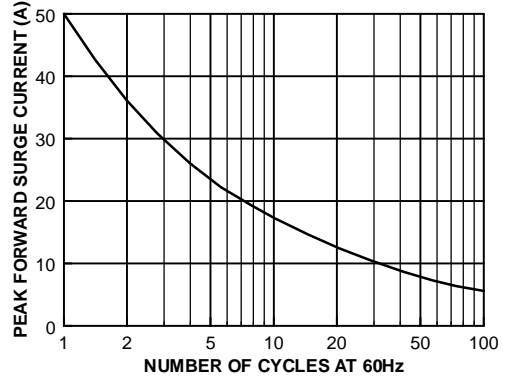
Parameter	Device							Units
	2A	2B	2D	2G	2J	2K	2M	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated $V_R$ )	50	100	200	400	600	800	1000	V
Maximum Reverse Current @ rated $V_R$								$\mu\text{A}$
								$\mu\text{A}$
Maximum Forward Voltage @ 1.5 A								V
Maximum Reverse Recovery Time $I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{rr} = 0.25 \text{ A}$								$\mu\text{S}$
Typical Junction Capacitance $V_R = 4.0 \text{ V}, f = 1.0 \text{ MHz}$								pF

Typical Characteristics

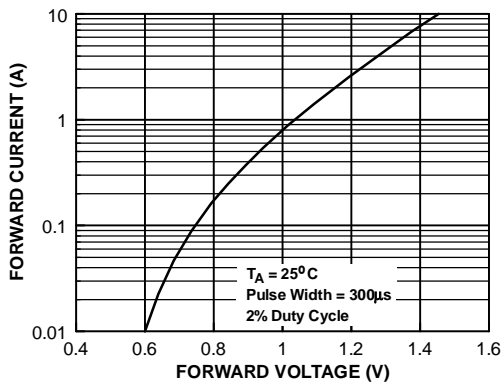
Forward Current Derating Curve



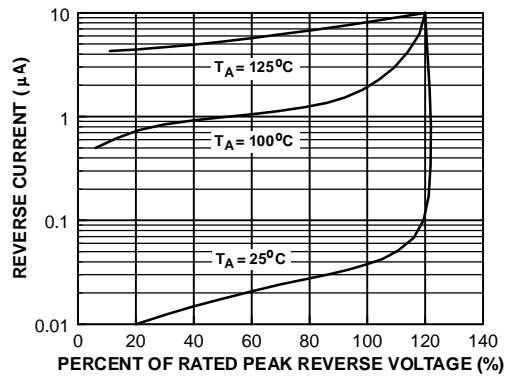
Non-Repetitive Surge Current



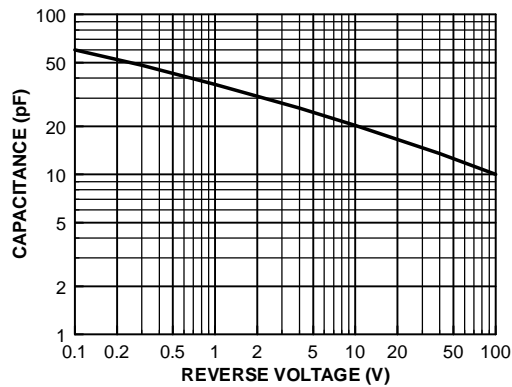
Forward Characteristics



Reverse Characteristics



Junction Capacitance



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