

# Discrete POWER & Signal Technologies

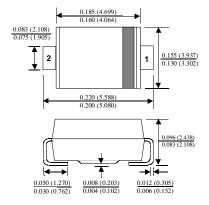
# **S2A - S2M**

#### **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\***

 $T_A = 25$ °C unless otherwise noted

Symbol	Parameter	Value	Units
lo	Average Rectified Current  @ T <sub>A</sub> = 100°C	1.5	Α
İ <sub>f(surge)</sub>	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	50	А
P <sub>D</sub>	Total Device Dissipation Derate above 25°C	2.35 18.8	W mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case **	16	°C/W
T <sub>stg</sub>	Storage Temperature Range	-65 to +150	°C
TJ	Operating Junction Temperature	-65 to +150	°C

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

### **Electrical Characteristics**

T<sub>A</sub> = 25°C unless otherwise noted

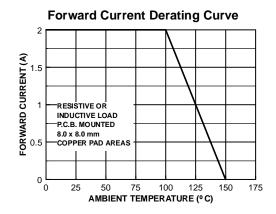
Parameter	Device							Units
	2A	2B	2D	2G	2J	2K	2M	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V <sub>R</sub> )	50	100	200	400	600	800	1000	V
Maximum Reverse Current					l	l		
@ rated $V_R$ $T_A = 25^{\circ}C$				1.0				μΑ
$T_A = 125^{\circ}C$				125				μΑ
Maximum Forward Voltage @ 1.5 A	1.15							V
Maximum Reverse Recovery Time				2.0				μS
$I_F = 0.5 \text{ A}, I_R = 1.0 \text{ A}, I_{rr} = 0.25 \text{ A}$								·
Typical Junction Capacitance				30				pF
$V_R = 4.0 \text{ V}, f = 1.0 \text{ MHz}$								

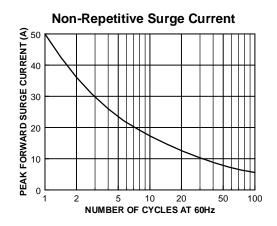
<sup>\*\*</sup>Device mounted on FR-4 PCB 0.013 mm.

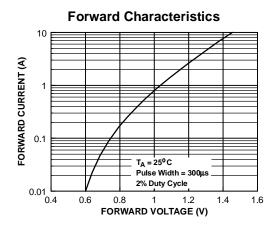
### **Surface Mount Rectifiers**

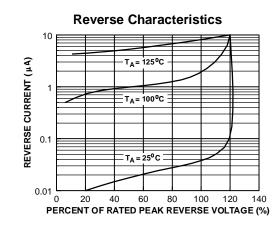
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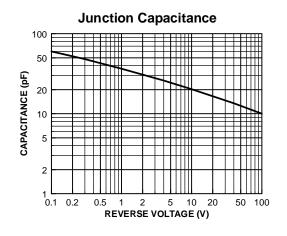
### **Typical Characteristics**











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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.				
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