

# S1A~S1M

## GENERAL PURPOSE PLASTIC RECTIFIER

**VOLTAGE** 50 to 1000 Volt **CURRENT** 1 Ampere

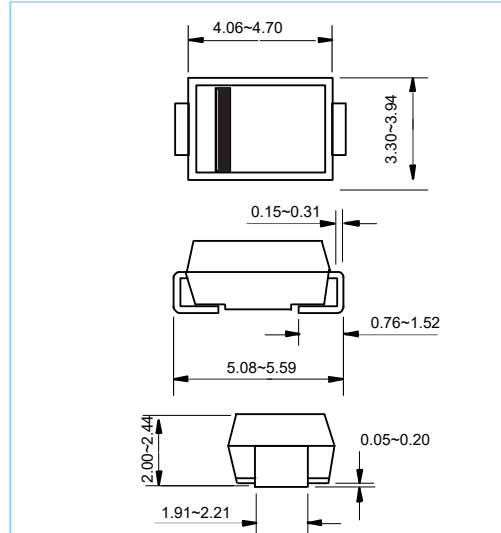
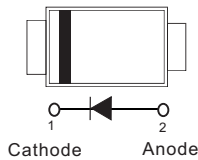
**SMB / DO-214AA** Unit:mm

### FEATURES

- Extremely Low Thermal Resistance
- Glass Passivated Junction
- Easy Pick And Place
- Moisture Sensitivity Level 1
- Lead free in compliance with EU RoHS 2.0

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Current (see FIG.1)	$I_{F(AV)}$	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30							A
Maximum Forward Voltage at 1 A	$V_F$	1.10							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0 50							$\mu A$
Typical Junction Capacitance (Note1)	$C_J$	12							pF
Thermal Resistance	$R_{\theta JL}$	30							$^{\circ}C / W$
Operating Junction Temperature Range	$T_J$	-55 to +150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^{\circ}C$

#### NOTES:

- 1 Measured at 1.0MHz and applied reverse voltage of 4.0 volt

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## RATING AND CHARACTERISTIC CURVES

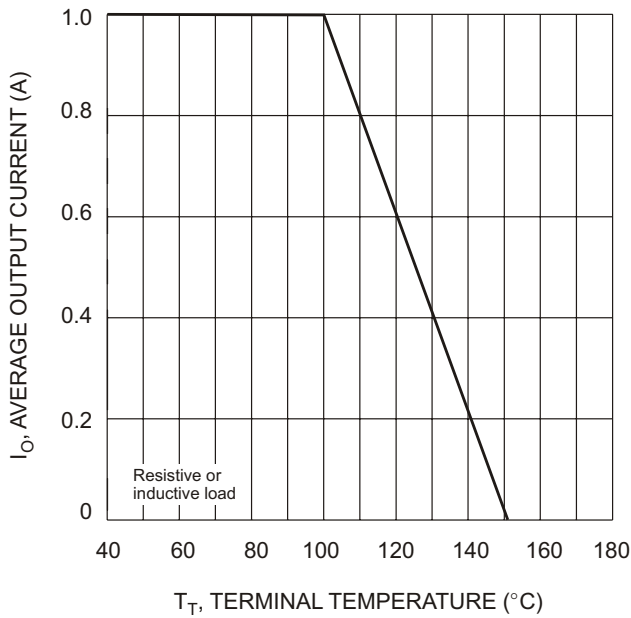


Fig. 1 Forward Current Derating Curve

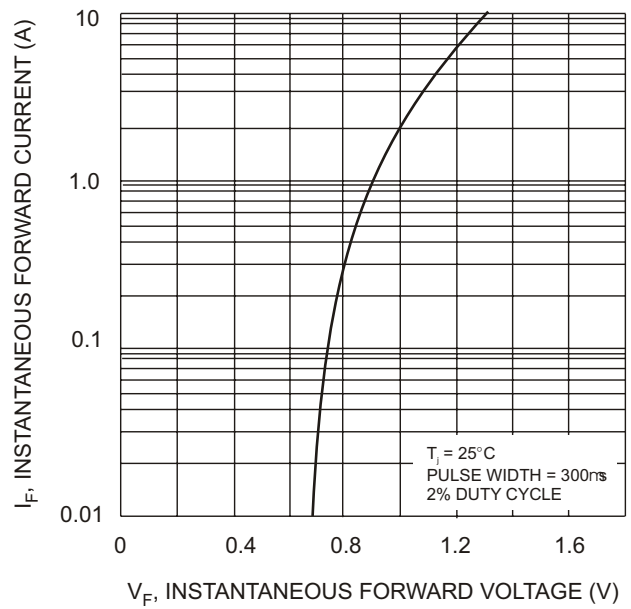


Fig. 2 Typical Forward Characteristics

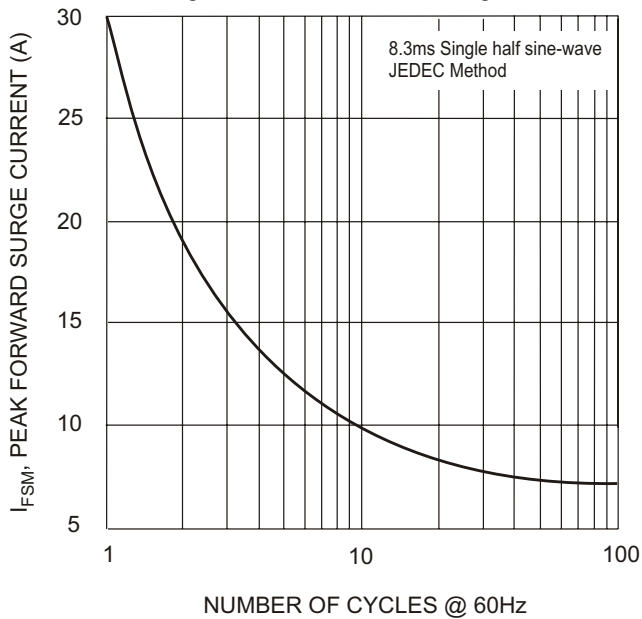


Fig. 3 Typical Forward Characteristics

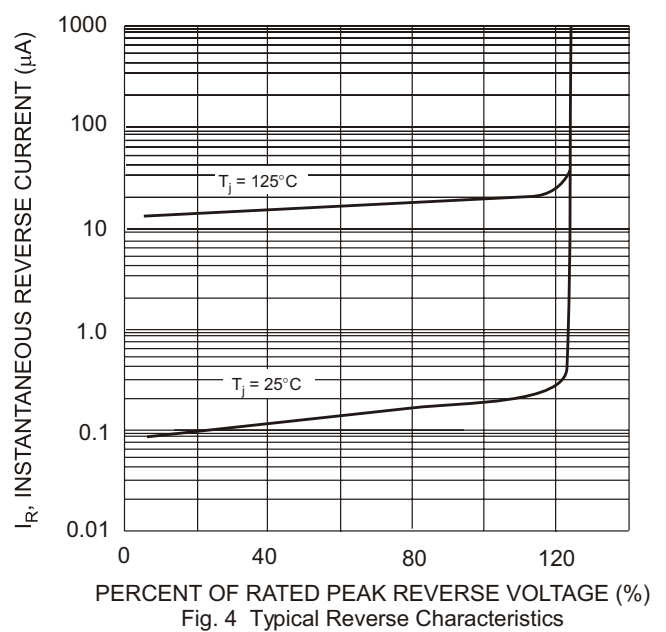


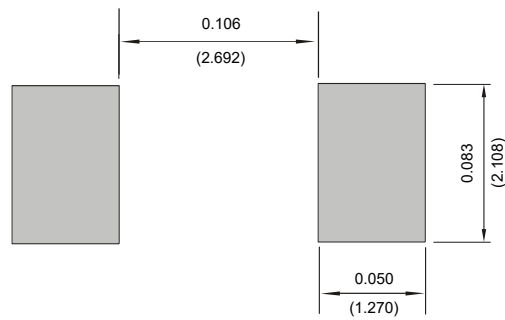
Fig. 4 Typical Reverse Characteristics

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## MOUNTING PAD LAYOUT

### SMB / DO-214AA

Unit:Inch(mm)



## ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
S1A~S1M	SMB	13 Inch	3000