

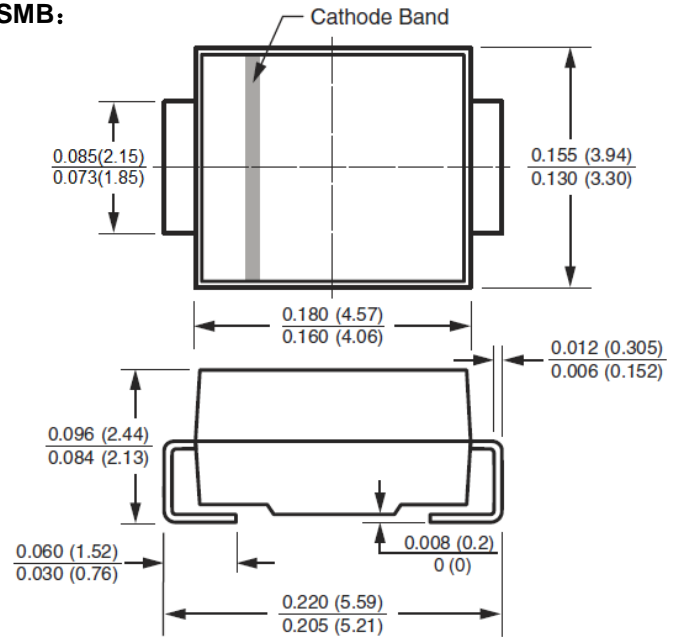
### Features

- \* Glass passivated chip junction
- \* Ideal for automated placement
- \* Low forward voltage drop
- \* High surge current capability
- \* Plastic Material Used Carries Underwriters Laboratory Classification 94V-0



### Package Outline Dimensions in inches (millimeters)

SMB:



### Mechanical Data

- \* Case: DO-214AA Molded plastic
- \* Terminals: Solder plated
- \* Polarity: Indicated by cathode band
- \* Standard packaging: 12mm tape(ELA STD RS-481)

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbols	S1AB	S1BB	S1DB	S1GB	S1JB	S1KB	S1MB	Unit
Maximum Repetitive 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 D.C Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1							A
Peak Forward Surge Current, 8.3ms single half sine-wave	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage at 2.0A (Note1)	$V_F$	1.1							V
Maximum reverse current @ rated VR	$I_R$	5.0							$\mu A$
		50							
Typical Junction Capacitance(Note2)	$C_J$	12							pF
Typical thermal resistance	$R_{\theta JL}$	30							°C/W
Operating and Storage Temperature Range	$T_J/T_{STG}$	-55 to +175							°C

Note: 1、 Pulse test with PW=300 $\mu$ s, 1% duty cycle 2、 Measured at 1MHz and applied reverse voltage of 4.0V D.C.

### Ratings and Characteristic Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

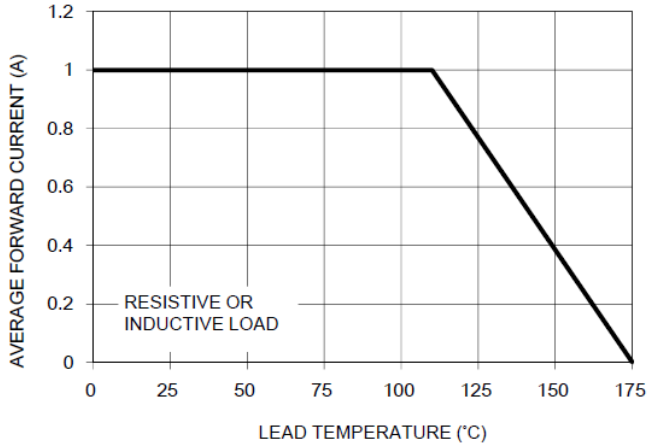


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

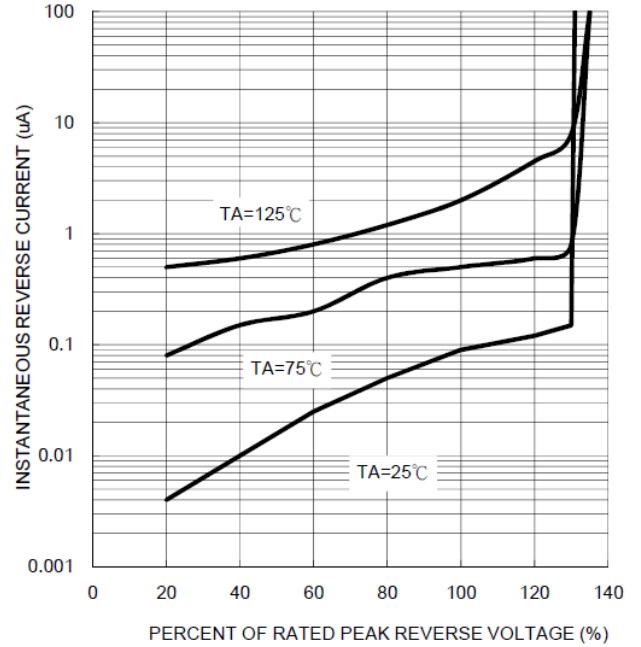


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

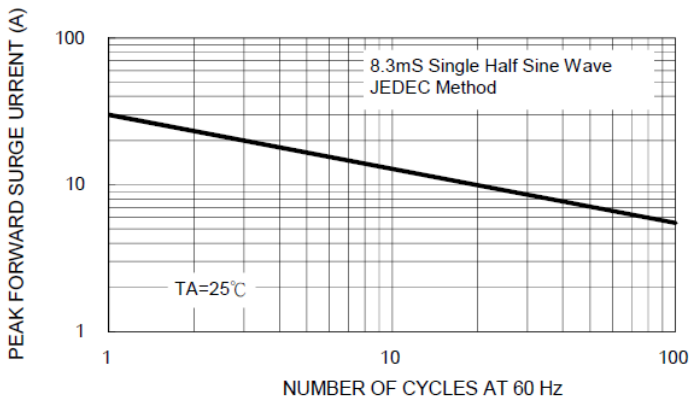


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

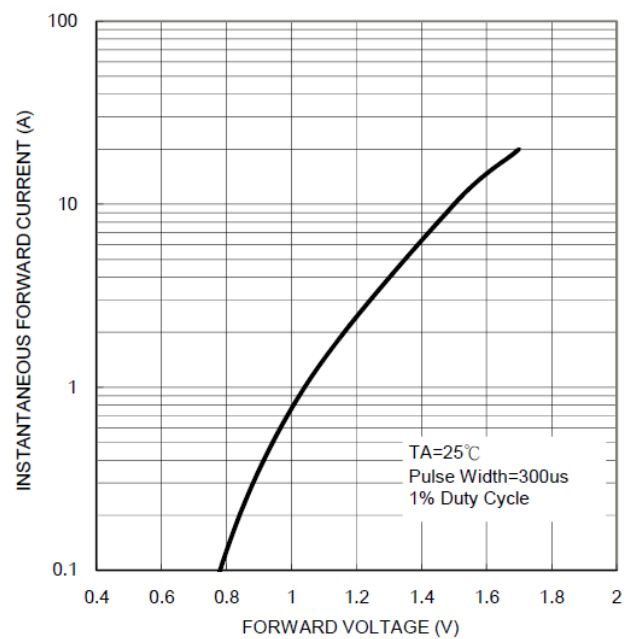
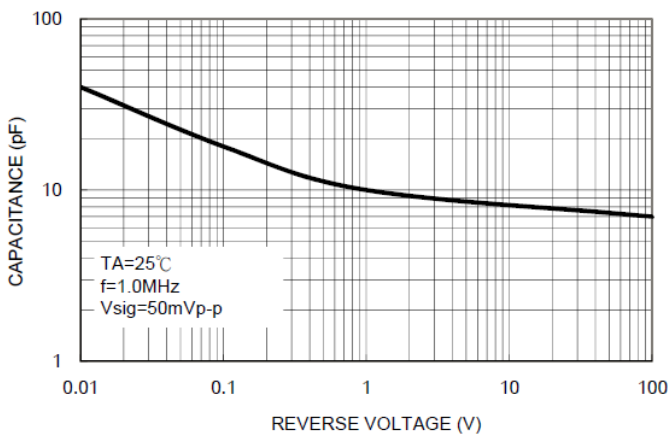


FIG. 4 TYPICAL JUNCTION CAPACITANCE





**S1AB THRU S1MB**  
*1.0 Amps. Surface Mount Rectifiers*

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**Ordering Information**

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<b>Part No.</b>	<b>Package</b>	<b>Packing</b>
S1AB~S1MB	SMB	3K/Reel