

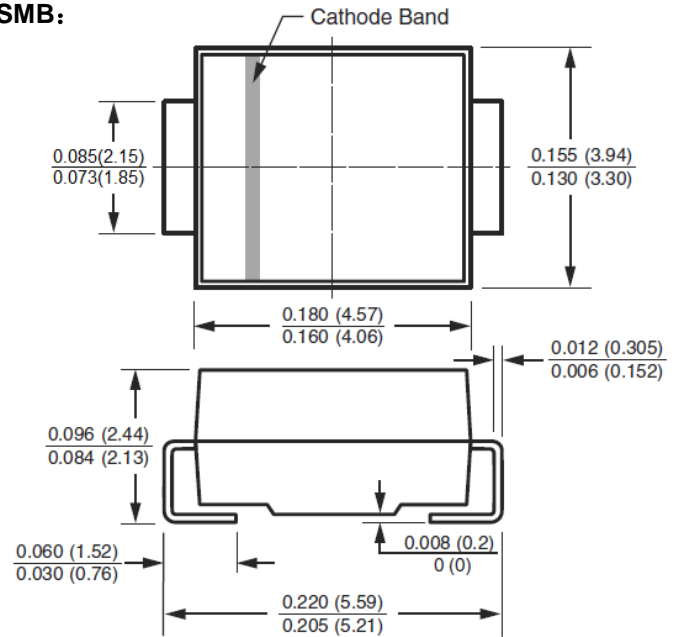
### Features

- \* 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	S2A	S2B	S2D	S2G	S2J	S2K	S2M	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	$I_{F(AV)}$	2							A
Peak Forward Surge Current, 8.3ms single half sine-wave	$I_{FSM}$	60							A
Maximum Instantaneous Forward Voltage at 2.0A (Note1)	$V_F$	1.1							V
Maximum reverse current @ rated VR	$I_R$	1.0							$\mu A$
		125							
Maximum Reverse Recovery Time(Note2)	$T_{rr}$	2.0							$\mu S$
Typical Junction Capacitance(Note3)	$C_J$	30							pF
Typical thermal resistance	$R_{\theta JL}$	16							$^{\circ}C/W$
	$R_{\theta JA}$	53							
Operating and Storage Temperature Range	$T_J/T_{STG}$	-55 to +175							$^{\circ}C$

Note: 1. Pulse test with PW=300 $\mu s$ , 1% duty cycle 2. Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$ .  
3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

### Ratings and Characteristic Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

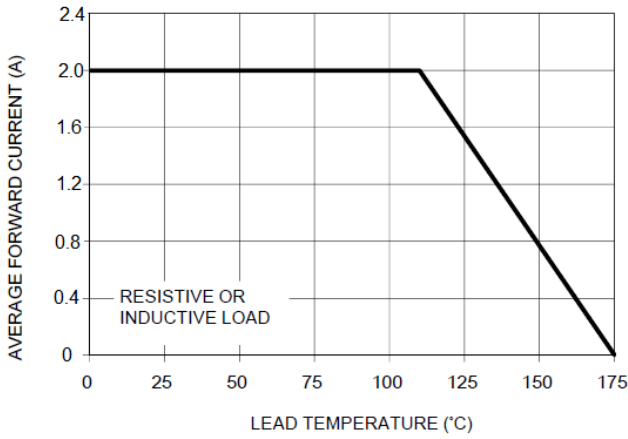


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

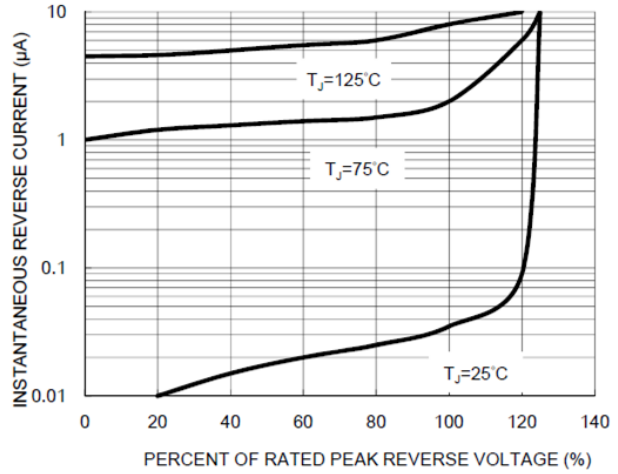


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

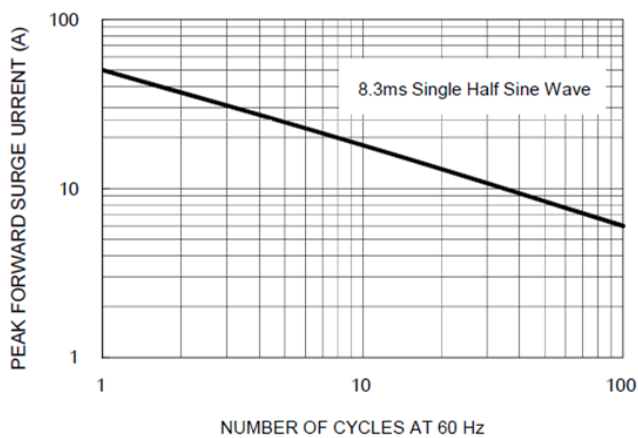


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

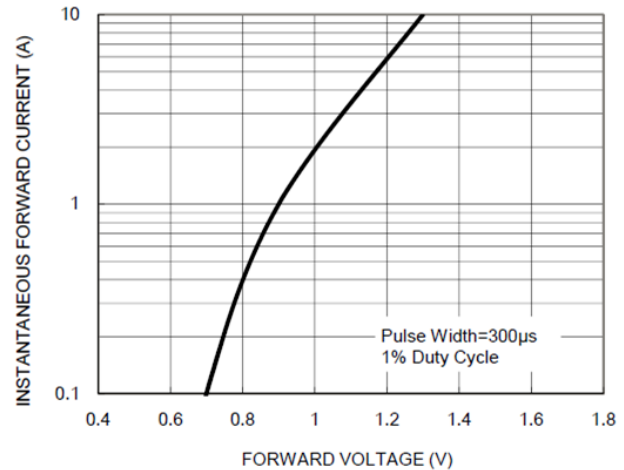


FIG. 5 TYPICAL JUNCTION CAPACITANCE

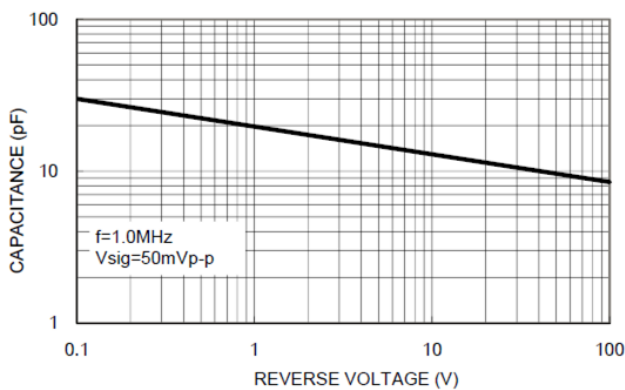
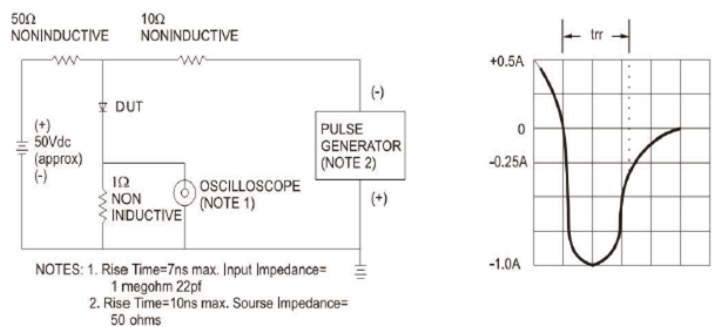


FIG. 6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





**S2A THRU S2M**  
*2.0 Amps. Surface Mount Rectifiers*

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**Ordering Information**

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<b>Part No.</b>	<b>Package</b>	<b>Packing</b>
S2A~S2M	SMB	3K/Reel