

### Features

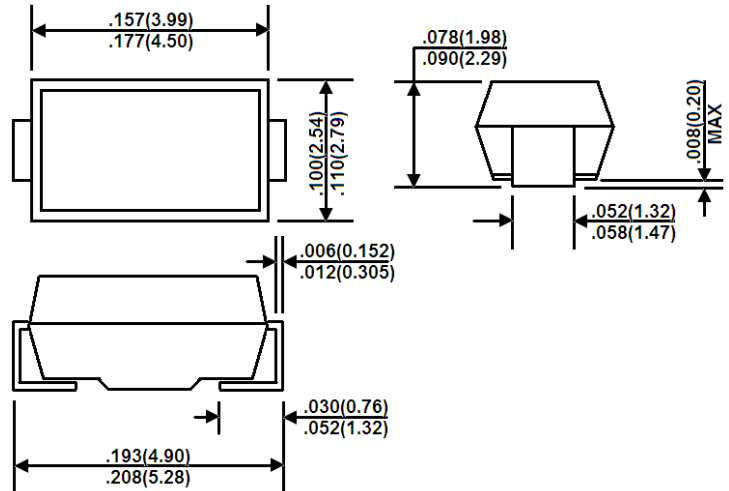
- \* For surface mounted application
- \* Low Forward Voltage Drop
- \* High Current Capability
- \* Easy Pick and Place
- \* High Surge Current Capability
- \* Plastic Material Used Carries Underwriters Laboratory Classification 94V-0



**RoHS**  
COMPLIANT

### Package Outline Dimensions in inches (millimeters)

#### SMA:



### Mechanical Data

- \* Case: 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	S2AA	S2BA	S2DA	S2GA	S2JA	S2KA	S2MA	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	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave	$I_{FSM}$	50							A
Maximum Instantaneous Forward Voltage at 1.5A	$V_F$	1.1							V
Maximum D.C Reverse Current @ $T_J=25^{\circ}C$ at Rated D.C Blocking Voltage @ $T_J=125^{\circ}C$	$I_R$	5.0 125							$\mu A$
Maximum Reverse Recovery Time(Note1)	$T_{rr}$	1.5							$\mu S$
Typical Junction Capacitance(Note2)	$C_J$	30							pF
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	16 53							$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J/T_{STG}$	-55 to +150							$^{\circ}C$

Note: 1、 Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$ . 2、 Measured at 1MHz and applied reverse voltage of 4.0V D.C.

### Ratings and Characteristic Curves

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

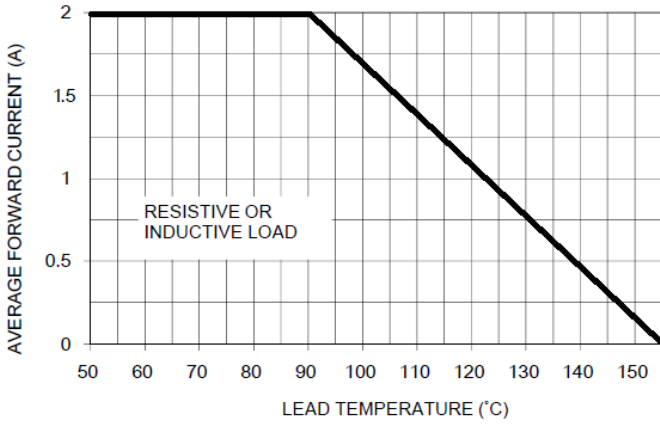


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

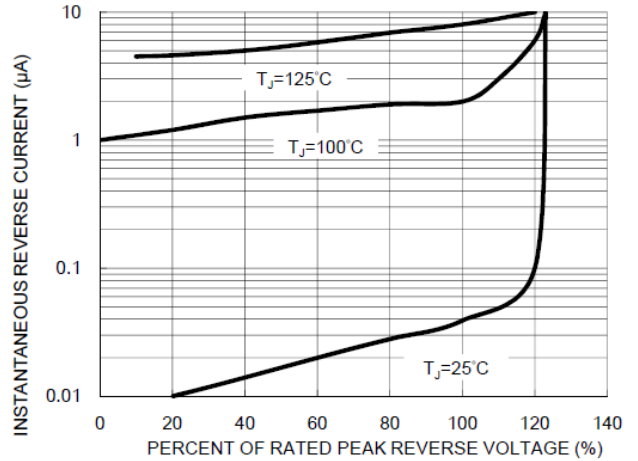


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

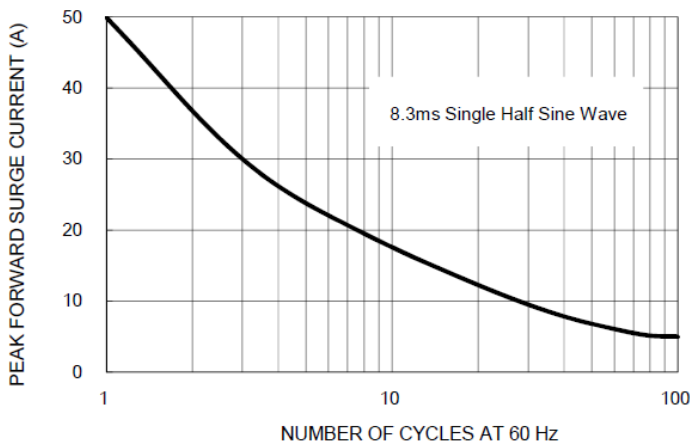


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

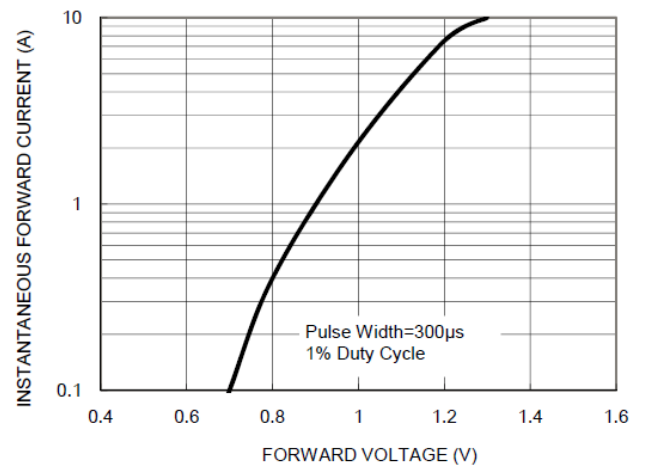


FIG. 5 TYPICAL JUNCTION CAPACITANCE

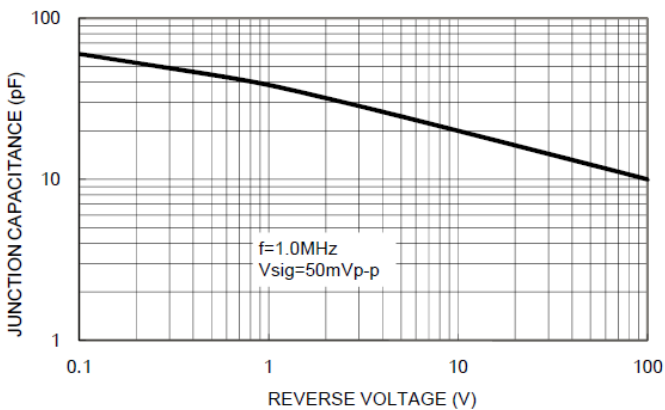
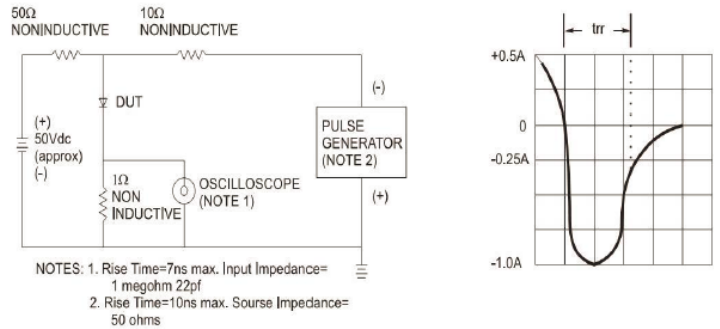


FIG. 6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





## S2AA THRU S2MA

2.0 Amps. Surface Mount Rectifiers

### Ordering Information

Part No.	Package	Packing
S2AA~S2MA	SMA	5K/Reel
S2AA~S2MA	SMA	6K/Reel
S2AA~S2MA	SMA	7.5K/Reel