

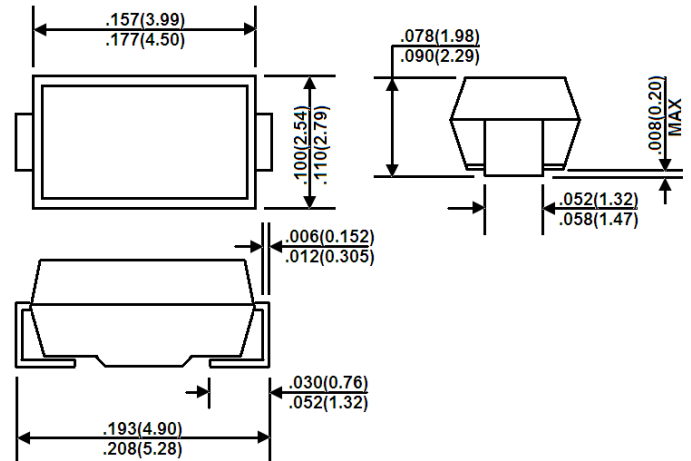
Features

- * 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
- * High Temp Soldering: 260°C for 10seconds at Terminals



Package Outline Dimensions in inches (millimeters)

SMA:



Mechanical Data

- * Case: DO-214AC 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	S1A	S1B	S1D	S1G	S1J	S1K	S1M	S1T	S1W	S1X	S1Y	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1300	1600	1800	2000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	910	1120	1260	1400	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1300	1600	1800	2000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0										A	
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	40					30					A	
Maximum Instantaneous Forward Voltage at 1.0A (Note1)	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 50										μA	
Maximum Reverse Recovery Time(Note2)	T_{rr}	2										μS	
Typical Junction Capacitance(Note3)	C_J	12										pF	
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	27 75					30 85					$^\circ C/W$	
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +175										$^\circ C$	

Note: 1、 Pulse Test with PW=300 μs , 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

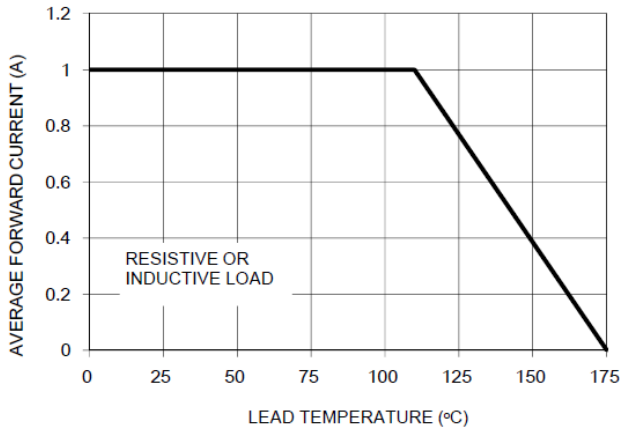


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

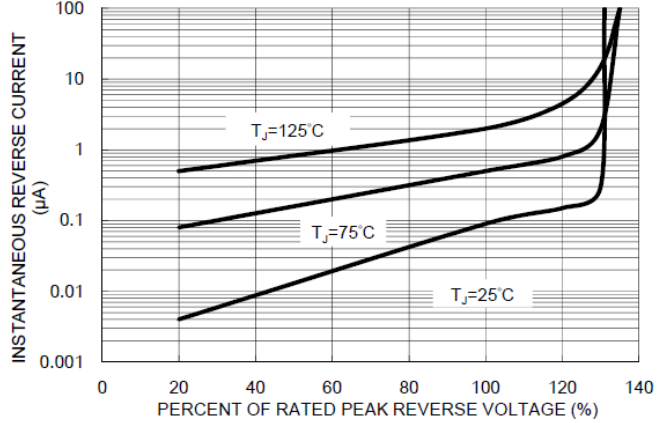


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

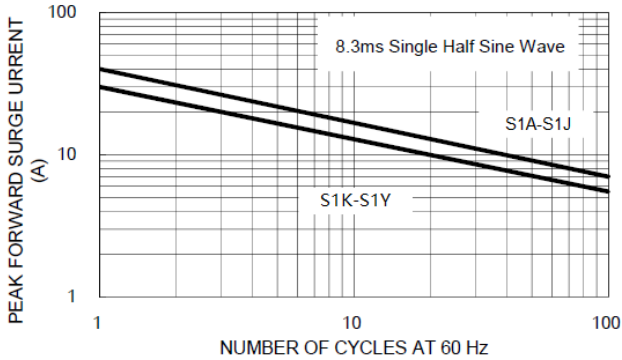


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

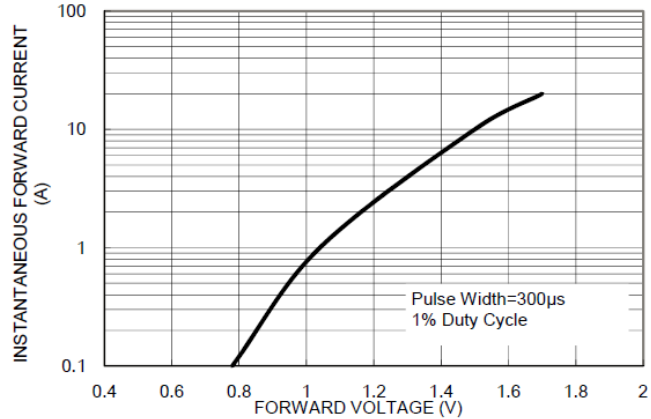


FIG. 5 TYPICAL JUNCTION CAPACITANCE

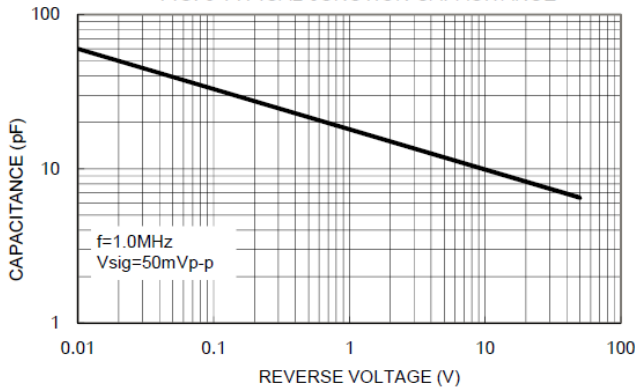
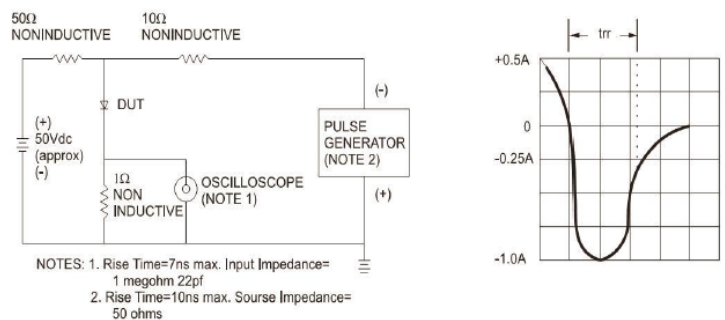


FIG. 6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





S1A THRU S1Y

1.0 Amp. Surface Mount Rectifiers

Ordering Information

Part No.	Package	Packing
S1A~S1Y	SMA	5K/Reel
S1A~S1Y	SMA	6K/Reel
S1A~S1Y	SMA	7.5K/Reel