
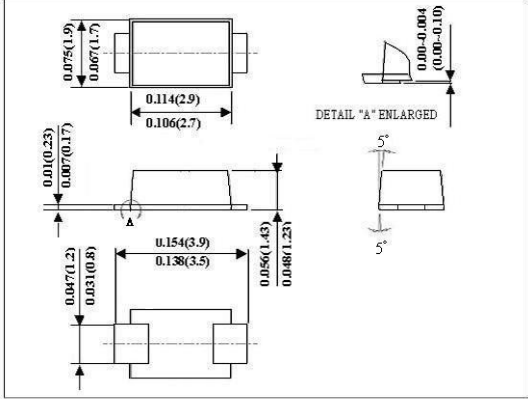
	<h2 style="margin: 0;">S1AL THRU S1ML</h2> <h3 style="margin: 0;">1.0 AMP. Surface Mount Rectifiers</h3>
	Voltage Range 50 to 1000 Volts Current 1.0 Ampere
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>✧ For surface mounted application</li> <li>✧ Glass passivated junction chip.</li> <li>✧ Low-PROFILE PACKAGE</li> <li>✧ Ideal for automated placement</li> <li>✧ Low power loss, high efficiency</li> <li>✧ High temperature soldering: 260°C / 10 seconds at terminals</li> </ul> <p><b>Mechanical Data</b></p> <ul style="list-style-type: none"> <li>✧ Case: JEDEC DO-219-AB(SMF) plastic case</li> <li>✧ Polarity: Color band denotes cathode end</li> <li>✧ Packaging: 12mm tape per EIA STD RS-481</li> <li>✧ Weight: approx. 15mg</li> </ul>	<p style="text-align: center;"><b>Sub SMA</b></p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

**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	Symbol	S1AL	S1BL	S1DL	S1GL	S1JL	S1KL	S1ML	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
Marking Code (Note 4)		1ALYM	1BLYM	1DLYM	1GLYM	1JLYM	1KLYM	1MLYM	
Maximum Average Forward Rectified Current @ $T_L = 110^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_R$	5 50							uA uA
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$ $R_{\theta JA}$	27 75					30 85		$^\circ\text{C}/\text{W}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	1.8							uS
Typical Junction Capacitance (Note 2)	$C_j$	12							pF
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

- Notes: 1. Reverse Recovery Test Conditions:  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$   
 2. Measured at 1 MHz and Applied  $V_R = 4.0$  Volts  
 3. Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas.  
 4 1ALYM: 1=1A, A=50V, L-Low Profile, Y-Year Code, M-Month Code



## RATINGS AND CHARACTERISTIC CURVES (S1AL THRU S1ML)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

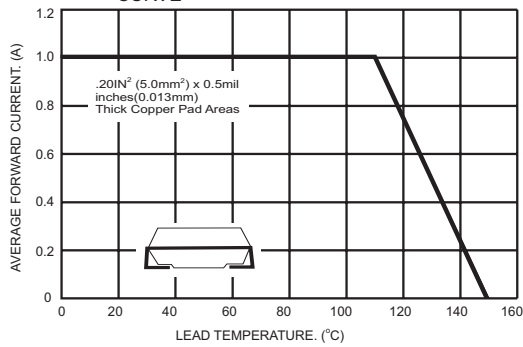


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

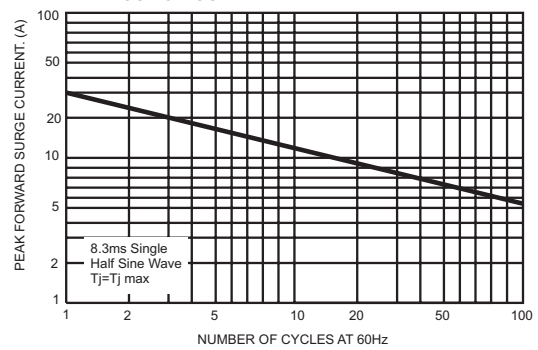


FIG.3- TYPICAL FORWARD CHARACTERISTICS

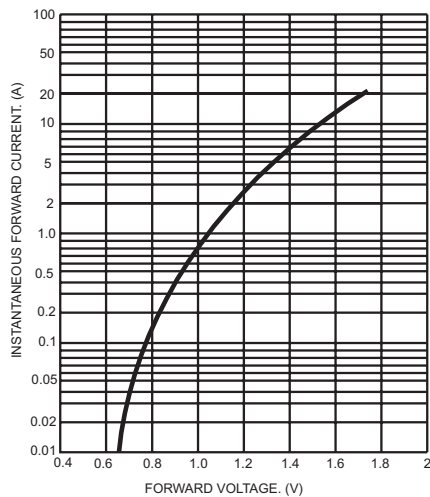


FIG.4- TYPICAL REVERSE CHARACTERISTICS

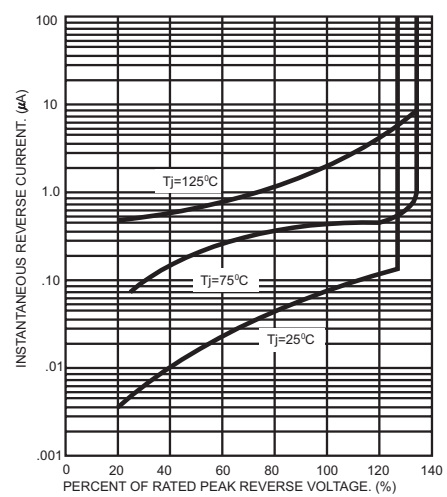


FIG.5- TYPICAL JUNCTION CAPACITANCE

