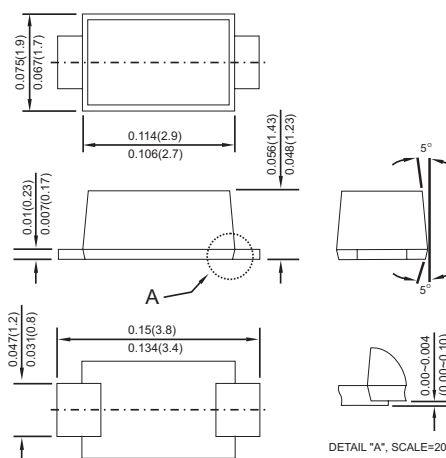


TSC 	S1AL THRU S1ML 1.0 AMP. Surface Mount Rectifiers										
		Voltage Range 50 to 1000 Volts Current 1.0 Ampere									
Features ✧ For surface mounted application ✧ Glass passivated junction chip. ✧ Low-PROFILE PACKAGE ✧ Ideal for automated placement ✧ Low power loss, high efficiency ✧ High temperature soldering: 260°C / 10 seconds at terminals		Sub SMA  Dimensions in inches and (millimeters)									
Mechanical Data ✧ Case: JEDEC DO-219-AB(SMF) plastic case ✧ Polarity: Color band denotes cathode end ✧ Packaging: 12mm tape per EIA STD RS-481 ✧ Weight: approx. 15mg											
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 3)			1ALYM	1BLYM	1DLYM	1GLYM	1JLYM	1KLYM	1MLYM		
Maximum Average Forward Rectified Current @T _L =110°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°C at Rated DC Blocking Voltage @ T _A =125°C		I _R	5 50							uA uA	
Typical Thermal Resis tance (Note 2)		RθJL RθJA	25 85					30 85		°C/W	
Typical Junction Capacitance (Note 1)		C _j	9							pF	
Operating Temperature Range		T _J	-55 to +150							°C	
Storage Temperature Range		T _{STG}	-55 to +150							°C	

Notes: 1. Measured at 1 MHz and Applied $V_R = 4.0$ Volts
 2. Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas.
 3. 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

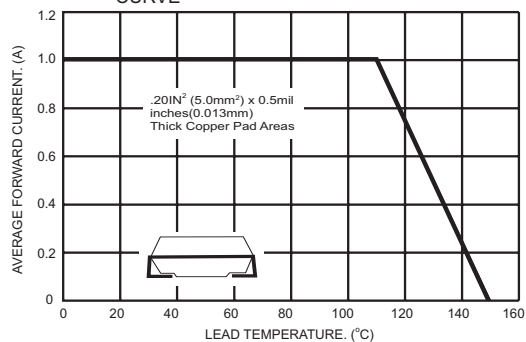


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

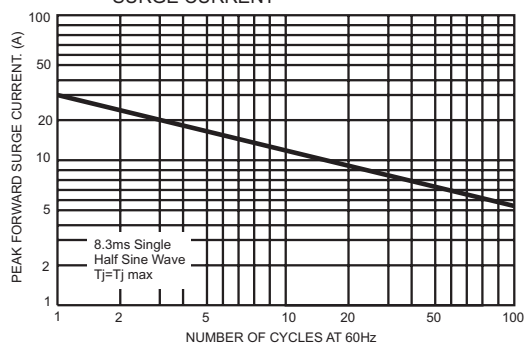


FIG.3- TYPICAL FORWARD CHARACTERISTICS

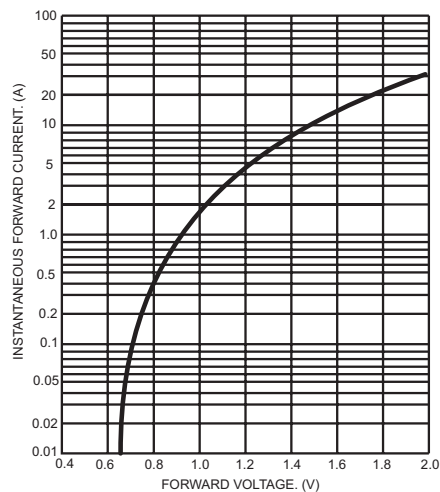


FIG.4- TYPICAL REVERSE CHARACTERISTICS

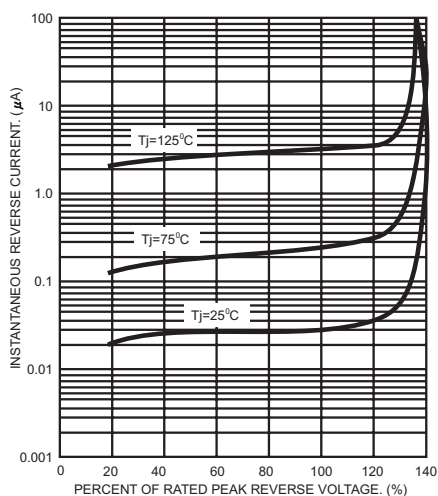


FIG.5- TYPICAL JUNCTION CAPACITANCE

