



# SS12L THRU SS110L

1.0 AMP. Surface Mount Schottky Barrier Rectifiers



Voltage Range  
20 to 100 Volts  
Current  
1.0 Ampere

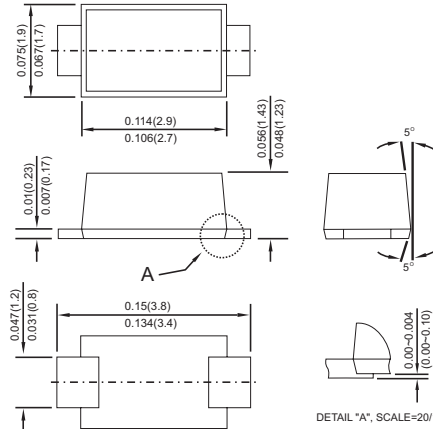
## Features

- ✧ For surface mounted application
- ✧ Low –PROFILE PACKAGE
- ✧ Ideal for automated placement
- ✧ Low power loss, high efficiency
- ✧ High temperature soldering:  
260°C / 10 seconds at terminals

## Mechanical Data

- ✧ Cases: Sub SMA plastic case
- ✧ Polarity: Color band denotes cathode end
- ✧ Packaging: 12mm tape per EIA STD RS-481
- ✧ Weight approx. 15mg

## Sub SMA



## 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	SS 12L	SS 13L	SS 14L	SS 15L	SS 16L	SS 19L	SS 110L	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	90	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	90	100	V
Marking Code (Note 2)		12LYM	13LYM	14LYM	15LYM	16LYM	19LYM	10LYM	
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.1							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 (Note 1) @ 0.5A @ 1.0A	$V_F$	0.385 0.45	0.43 0.50	0.51 0.55	0.58 0.70		0.65 0.80		V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	$I_R$	0.4					0.05		mA
		8.0	6.0				0.5		mA
Maximum Thermal Resistance (Note 3)	$R\theta_{JA}$ $R\theta_{JL}$	100 45							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +125							$^\circ\text{C}$

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle.

2. 12LYM: 1-1A, 2-20V, L-Low Profile, Y-Year Code, M-Month Code

3. Measured on P.C.Board with 0.2 x 0.2"(5.0 x 5.0mm) Copper Pad Areas.

## RATINGS AND CHARACTERISTIC CURVES (SS12L THRU SS110L)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

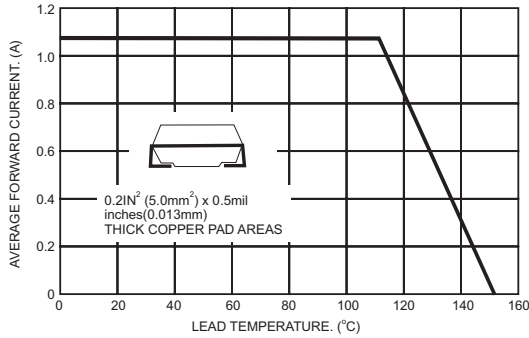


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

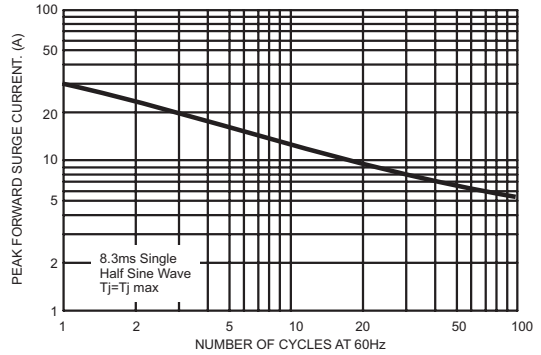


FIG.3- TYPICAL FORWARD CHARACTERISTICS

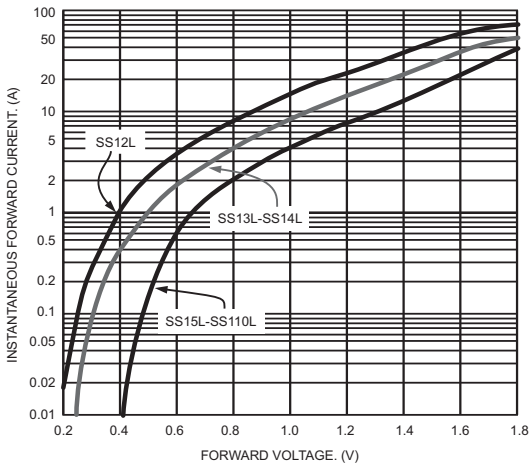


FIG.4- TYPICAL REVERSE CHARACTERISTICS

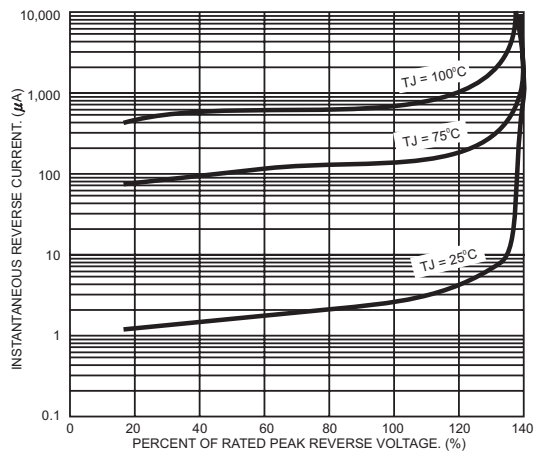


FIG.5- TYPICAL JUNCTION CAPACITANCE

