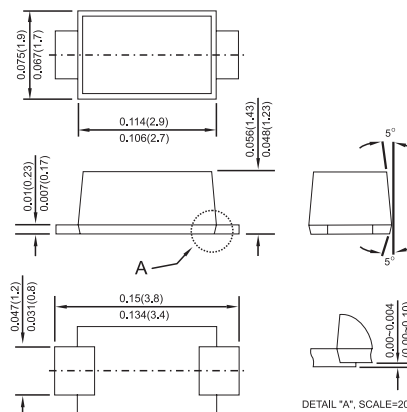




### Features

- ✦ For surface mounted application
- ✦ Low-Profile Package
- ✦ Ideal for automated pick & place
- ✦ Low power loss, high efficiency
- ✦ High current capability, low VF
- ✦ High surge current capability
- ✦ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ✦ Epitaxial construction
- ✦ High temperature soldering: 260°C / 10 seconds at terminals



### Mechanical Data

- ✦ Cases: Sub SMA plastic case
- ✦ Terminal : Pure tin plated, lead free.
- ✦ Polarity: Color band denotes cathode end
- ✦ Packaging: 12mm tape per EIA STD RS-481
- ✦ Weight approx. 15mg

Dimensions in inches and (millimeters)

### 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, de-rate current by 20%

Type Number	Symbol	SS 12L	SS 13L	SS 14L	SS 15L	SS 16L	SS 19L	SS 110L	SS 115L	Units	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	90	100	150	V	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	63	70	105	V	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	90	100	150	V	
Marking Code (Note 2)		12LYM	13LYM	14LYM	15LYM	16LYM	19LYM	10LYM	A5LYM		
Maximum Average Forward Rectified Current	$I_{(AV)}$	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 (Note 1)	$V_F$	@ 0.5A 0.385 @ 1.0A 0.45	0.43 0.50	0.51 0.55	0.58 0.70	0.65 0.80	0.75 0.90			V	
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	$I_R$	8.0	0.4 6.0				0.05 0.5				mA mA
Maximum Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	100 45								$^\circ\text{C/W}$	
Operating Temperature Range	$T_J$	-55 to +150								$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	-55 to +150								$^\circ\text{C}$	

- 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" (5.0mm x 5.0mm) Copper Pad Areas.

## RATINGS AND CHARACTERISTIC CURVES (SS12L THRU SS115L)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

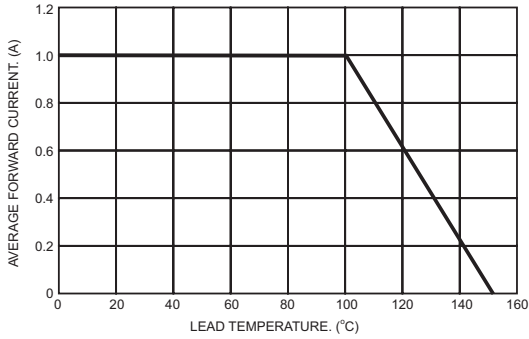


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

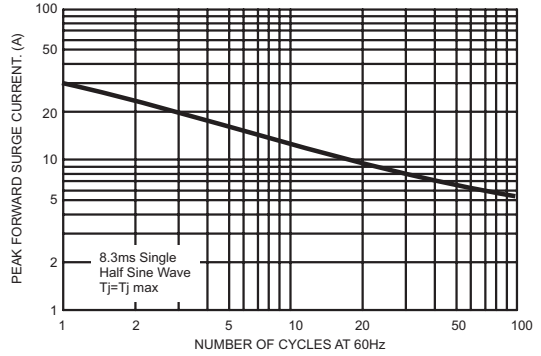


FIG.3- TYPICAL FORWARD CHARACTERISTICS

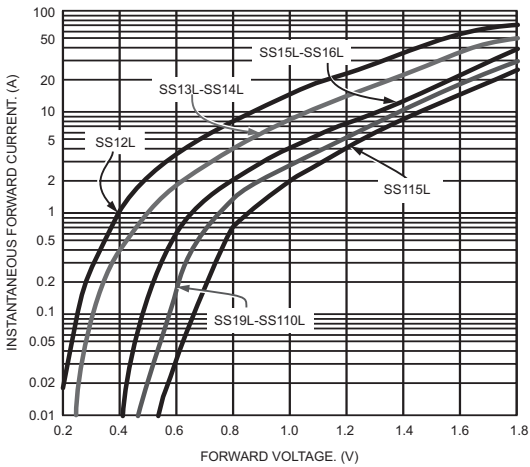


FIG.4- TYPICAL REVERSE CHARACTERISTICS

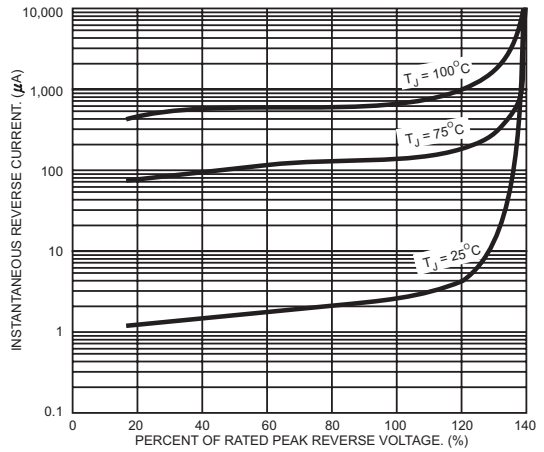


FIG.5- TYPICAL JUNCTION CAPACITANCE

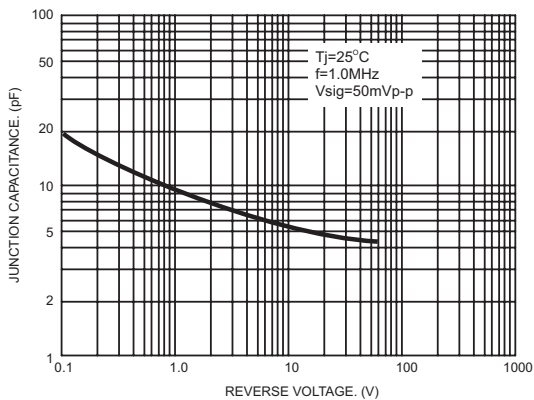


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

