

# SS22L - SS215L

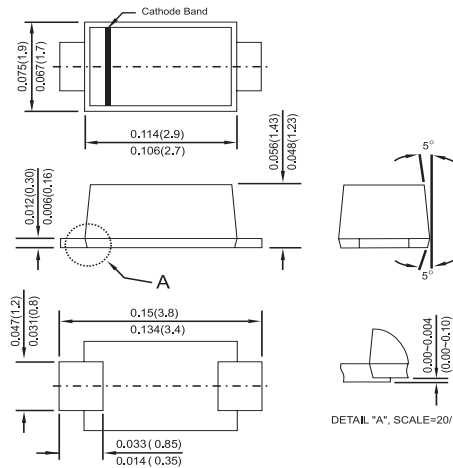
## 2.0 AMPS. Surface Mount Schottky Barrier Rectifiers

### Sub SMA



## 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 carries 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 22L      | SS 23L | SS 24L | SS 25L      | SS 26L | SS 29L | SS 210L | SS 215L | Units |
|----------------------------------------------------------------------------------------------------------|-------------------|-------------|--------|--------|-------------|--------|--------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                                   | V <sub>RRM</sub>  | 20          | 30     | 40     | 50          | 60     | 90     | 100     | 150     | V     |
| Maximum RMS Voltage                                                                                      | V <sub>RMS</sub>  | 14          | 21     | 28     | 35          | 42     | 63     | 70      | 105     | V     |
| Maximum DC Blocking Voltage                                                                              | V <sub>DC</sub>   | 20          | 30     | 40     | 50          | 60     | 90     | 100     | 150     | V     |
| Marking Code (Note 4)                                                                                    |                   | 22LYM       | 23LYM  | 24LYM  | 25LYM       | 26LYM  | 29LYM  | 20LYM   | 2ALYM   |       |
| Maximum Average Forward Rectified Current at T <sub>L</sub> (See Fig. 1)                                 | I <sub>(AV)</sub> | 2.0         |        |        |             |        |        |         |         | A     |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )      | I <sub>FSM</sub>  | 50          |        |        |             |        |        |         |         | A     |
| Maximum Instantaneous Forward Voltage (Note 1) @ 2.0A                                                    | V <sub>F</sub>    | 0.5         |        |        | 0.70        |        | 0.85   |         | 0.95    | V     |
| Maximum DC Reverse Current @ T <sub>A</sub> =25 °C at Rated DC Blocking Voltage @ T <sub>A</sub> =125 °C | I <sub>R</sub>    | 0.4         |        |        |             |        | 0.1    |         |         | mA    |
|                                                                                                          |                   | 15          |        |        | 10          |        | 5      |         | mA      |       |
| Typical Junction Capacitance (Note 3)                                                                    | C <sub>j</sub>    | 130         |        |        |             |        |        |         |         | pF    |
| Typical Thermal Resistance ( Note 2 )                                                                    | R <sub>θJL</sub>  | 17          |        |        |             |        |        |         |         | °C/W  |
|                                                                                                          | R <sub>θJA</sub>  | 75          |        |        |             |        |        |         |         |       |
| Operating Temperature Range                                                                              | T <sub>J</sub>    | -65 to +125 |        |        | -65 to +150 |        |        |         |         | °C    |
| Storage Temperature Range                                                                                | T <sub>STG</sub>  | -65 to +150 |        |        |             |        |        |         |         | °C    |

- Notes:
1. Pulse Test with PW=300 usec, 1% Duty Cycle
  2. Measured on P.C.Board with 0.2" x 0.2"(5mm x 5mm) Copper Pad Areas.
  3. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
  4. 22LYM: 2=2A, 2=20V, L=Low Profile, Y=Year Code, M=Month Code.

## RATINGS AND CHARACTERISTIC CURVES (SS22L THRU SS215L)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

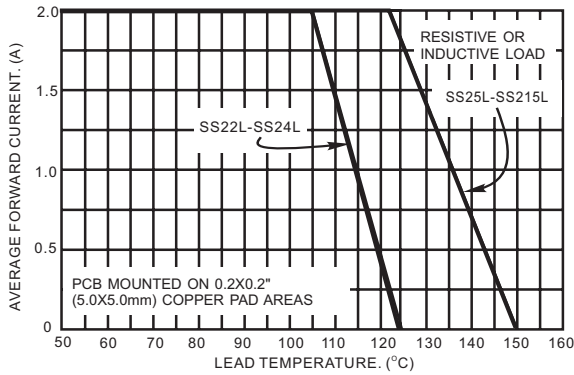


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

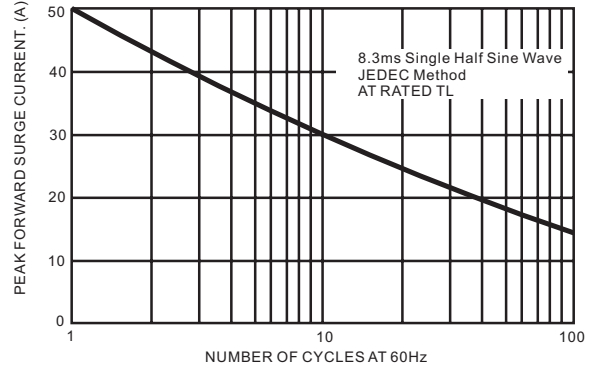


FIG.3- TYPICAL FORWARD CHARACTERISTICS

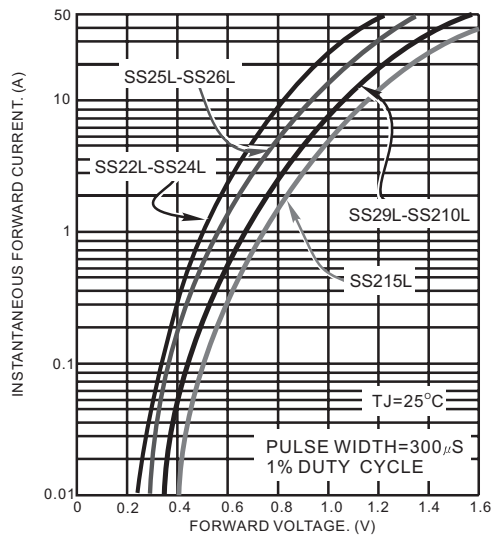


FIG.4- TYPICAL REVERSE CHARACTERISTICS

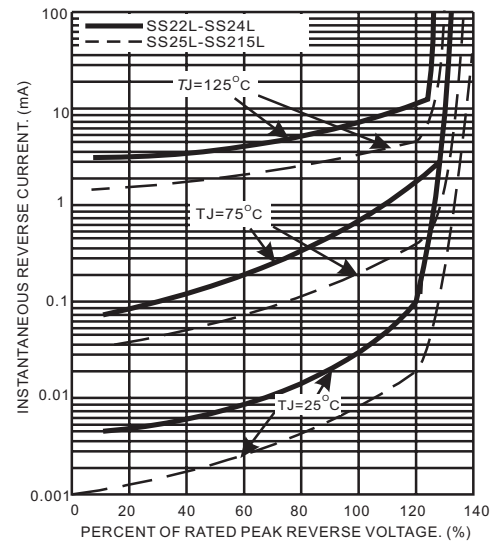


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

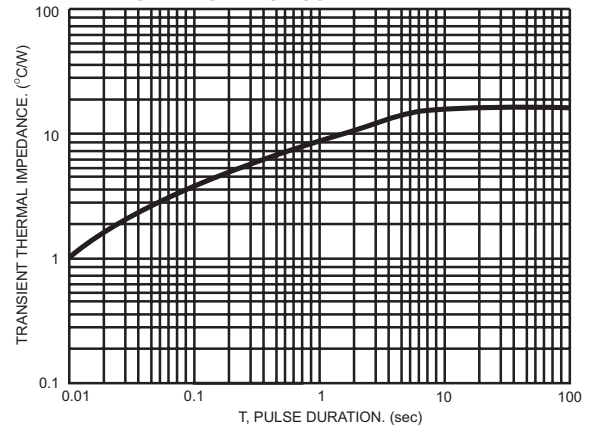


FIG.5- TYPICAL JUNCTION CAPACITANCE

