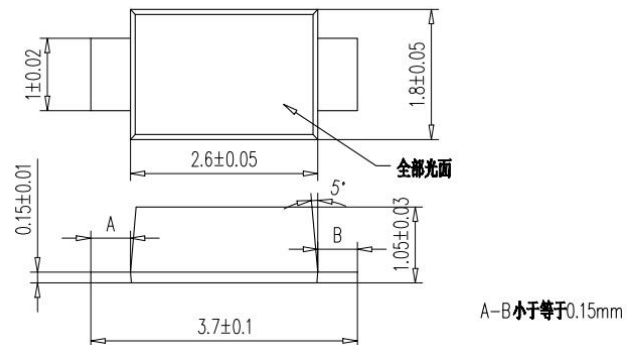


### Features

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier.majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- High current capacity,low VF
- For use in low voltage high frequency inverters,free wheeling and polarity protection applications.
- High temperature soldring guaranteed:260°C/10 seconds at terminals

### Schottky rectifier

#### SOD123FL



### Mechanical Data

Terminal: Plated leads, solderable per MIL-

- STD-750,Method 2026
- Case: molded plastic SOD123FL
- Polarity: Color band denotes positives end(cathode)
- Standard packaging:12mm tape(EIA-481)

Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.  
Single Phase, half wave, 60Hz, resistive or inductive

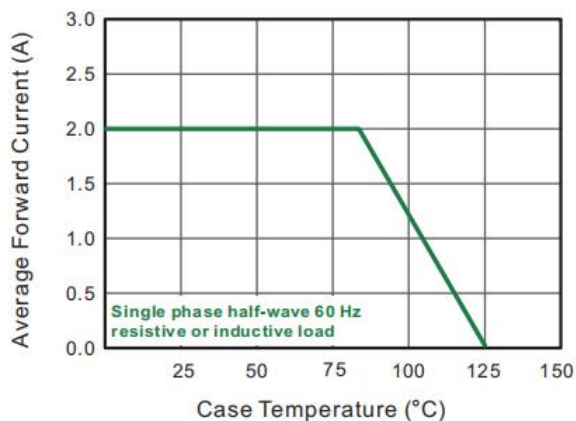
| Type Number                                                                                      | SYMBOL      | SS22FL      | SS23FL | SS24FL | SS25FL | SS26FL | SS28FL | SS210FL | SS212FL | SS215FL | SS220FL | unit  |
|--------------------------------------------------------------------------------------------------|-------------|-------------|--------|--------|--------|--------|--------|---------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                           | $V_{RRM}$   | 20          | 30     | 40     | 50     | 60     | 80     | 100     | 120     | 150     | 200     | V     |
| Maximum RMS Voltage                                                                              | $V_{RMS}$   | 14          | 21     | 28     | 35     | 42     | 56     | 70      | 84      | 105     | 140     | V     |
| Maximum DC blocking Voltage                                                                      | $V_{DC}$    | 20          | 30     | 40     | 50     | 60     | 80     | 100     | 120     | 150     | 200     | V     |
| Maximum Average Forward Rectified Current .at TA =55°C                                           | $I_{F(AV)}$ | 2           |        |        |        |        |        |         |         |         |         | A     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$   | 50          |        |        |        |        |        |         |         |         |         | A     |
| Maximum Forward Voltage at 1.5A DC                                                               | $V_F$       | 0.55        |        |        | 0.70   |        | 0.85   |         |         | 0.95    |         | V     |
| Maximum DC Reverse Current @TA =25°C                                                             | $I_R$       | 0.5         |        |        |        |        | 0.3    |         |         |         |         | mA    |
| At rated DC blocking voltage @TA=100°C                                                           |             | 5           |        |        |        |        | 3      |         |         |         |         |       |
| Typical Junction Capacitance (Note1)                                                             | $C_j$       | 220         |        |        | 80     |        |        |         |         |         |         | pF    |
| Typical Thermal Resistance (Note 2)                                                              | $R_{(JA)}$  | 85          |        |        |        |        |        |         |         |         |         | °C /W |
| Storage Temperature                                                                              | $T_{STG}$   | -55 to +150 |        |        |        |        |        |         |         |         |         | °C    |
| Operation Junction Temperature                                                                   | $T_J$       | -55 to +125 |        |        |        |        |        |         |         |         |         | °C    |

load. For capacitive load, derate current by 20%.

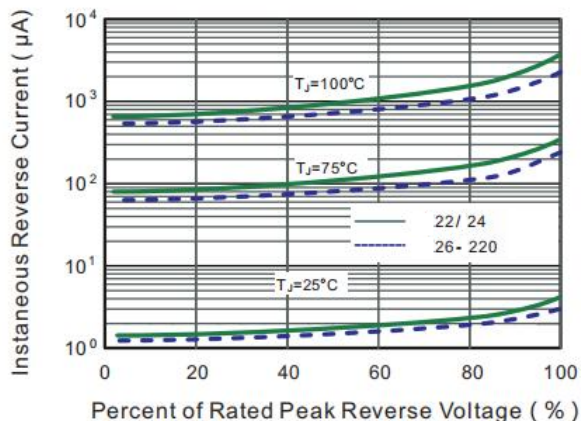
Note: 1. Pulse Test with PW=300μsec,2% Duty Cycle.

2. Mounted on P.C.Board with 5.0mm2(.013mm thick)copper pad areas.

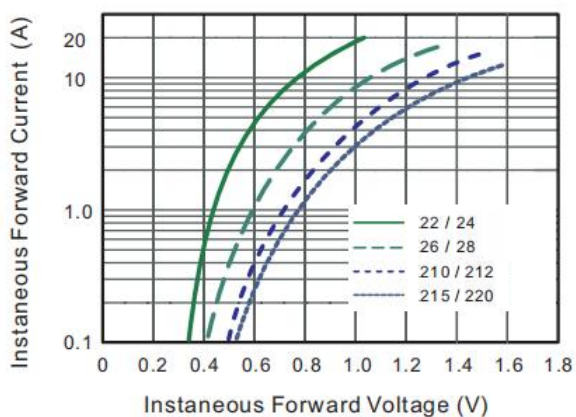
**Fig.1 Forward Current Derating Curve**



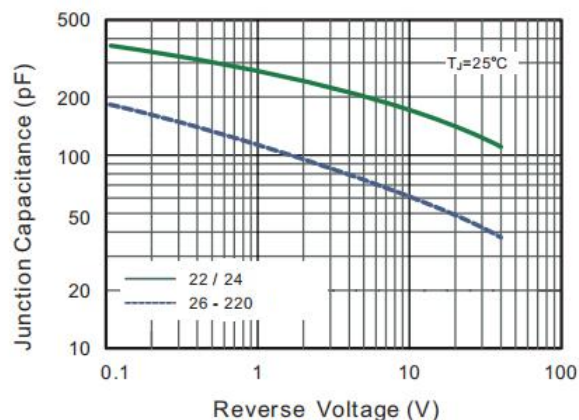
**Fig.2 Typical Reverse Characteristics**



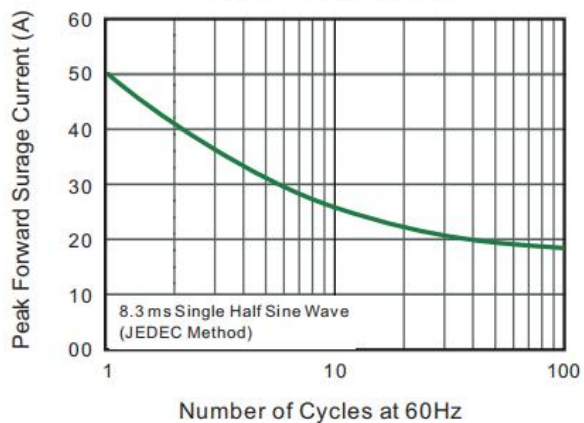
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**

