

# SS14

## 1.0Amp Surface Mounted Schottky Barrier Rectifiers

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief,ideal for automated placement
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals

### Mechanical Data

**Case** : Molded plastic body

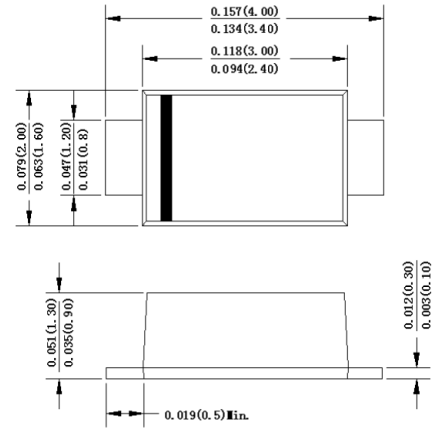
**Terminals** : Solder plated, solderable per MIL-STD-750,Method 2026

**Polarity** : Polarity symbol marking on body

**Mounting Position** : Any

**Weight** : 0.0007 ounce, 0.02 grams

### SOD123FL



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

### MARKING: K14

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Parameter                                                                                                 | SYMBOLS    | SS14        | UNITS              |
|-----------------------------------------------------------------------------------------------------------|------------|-------------|--------------------|
| Maximum repetitive peak reverse voltage                                                                   | $V_{RRM}$  | 40          | V                  |
| Maximum RMS voltage                                                                                       | $V_{RMS}$  | 28          | V                  |
| Maximum DC blocking voltage                                                                               | $V_{DC}$   | 40          | V                  |
| Maximum average forward rectified current at $T_L=100^\circ\text{C}$                                      | $I_{(AV)}$ | 1.0         | A                  |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load                        | $I_{FSM}$  | 30.0        | A                  |
| Maximum instantaneous forward voltage at 1.0A                                                             | $V_F$      | 0.55        | V                  |
| Maximum DC reverse current $T_A=25^\circ\text{C}$<br>at rated DC blocking voltage $T_A=125^\circ\text{C}$ | $I_R$      | 0.5<br>50   | mA                 |
| Typical thermal resistance                                                                                | $R_{qJA}$  | 85.0        | $^\circ\text{C/W}$ |
| Operating junction temperature range                                                                      | $T_J$      | -55 to +125 | $^\circ\text{C}$   |
| Storage temperature range                                                                                 | $T_{STG}$  | -55 to +150 | $^\circ\text{C}$   |

## Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

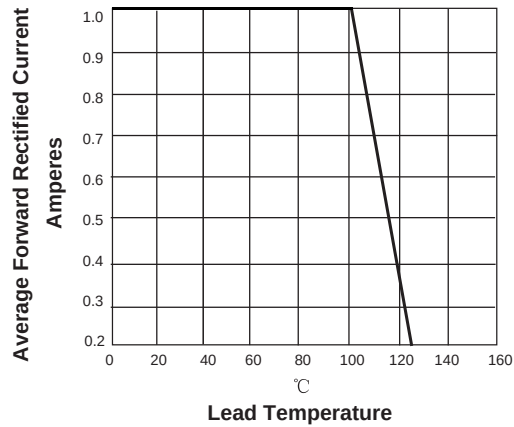


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

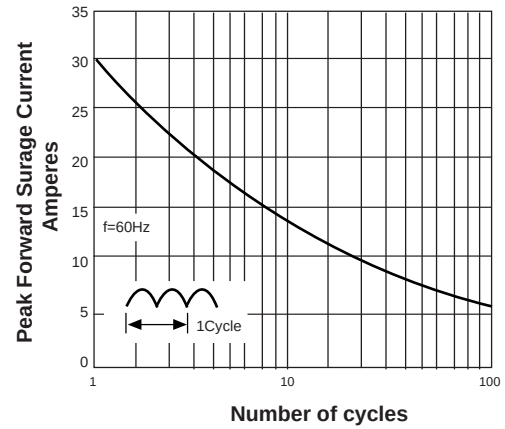


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

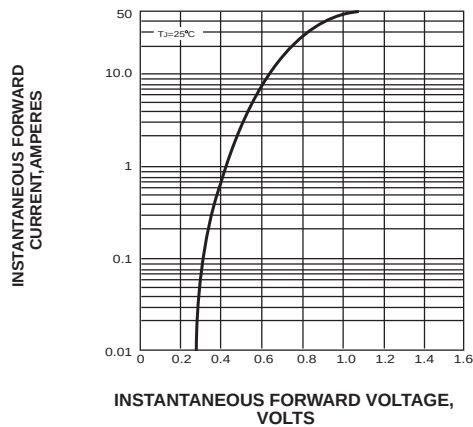


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

