

## Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

## MECHANICAL DATA

- Case: SOD-123FL



Top View  
Marking Code: K26

Simplified outline SOD-123FL and symbol

## PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |

## Absolute Maximum Ratings and Electrical characteristics

| Parameter                                                                                               | Symbols         | DSK26      | Units         |
|---------------------------------------------------------------------------------------------------------|-----------------|------------|---------------|
| Maximum Repetitive Peak Reverse Voltage                                                                 | $V_{RRM}$       | 60         | V             |
| Maximum RMS voltage                                                                                     | $V_{RMS}$       | 42         | V             |
| Maximum DC Blocking Voltage                                                                             | $V_{DC}$        | 60         | V             |
| Maximum Average Forward Rectified Current                                                               | $I_{F(AV)}$     | 2.0        | A             |
| Peak Forward Surge Current, 8.3ms<br>Single Half Sine-wave Superimposed<br>on Rated Load (JEDEC method) | $I_{FSM}$       | 50         | A             |
| Max Instantaneous Forward Voltage at 2 A                                                                | $V_F$           | 0.70       | V             |
| Maximum DC Reverse Current $T_a = 25^{\circ}C$<br>at Rated DC Reverse Voltage $T_a = 100^{\circ}C$      | $I_R$           | 0.5<br>5   | mA            |
| Typical Junction Capacitance <sup>(1)</sup>                                                             | $C_j$           | 220        | pF            |
| Typical Thermal Resistance <sup>(2)</sup>                                                               | $R_{\theta JA}$ | 85         | $^{\circ}C/W$ |
| Operating Junction Temperature Range                                                                    | $T_j$           | -55 ~ +150 | $^{\circ}C$   |
| Storage Temperature Range                                                                               | $T_{stg}$       | -55 ~ +150 | $^{\circ}C$   |

( 1 ) Measured at 1 MHz and applied reverse voltage of 4 V D.C

( 2 ) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fig.1 Forward Current Derating Curve

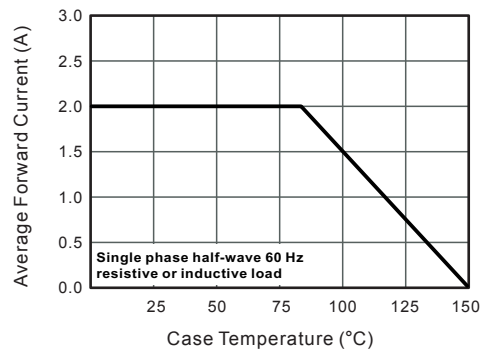


Fig.2 Typical Reverse Characteristics

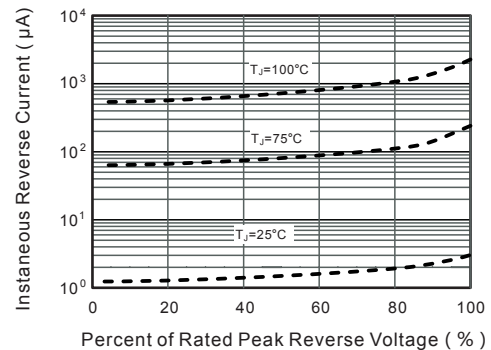


Fig.3 Typical Forward Characteristic

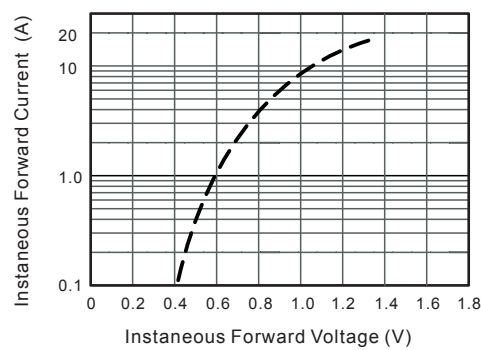


Fig.4 Typical Junction Capacitance

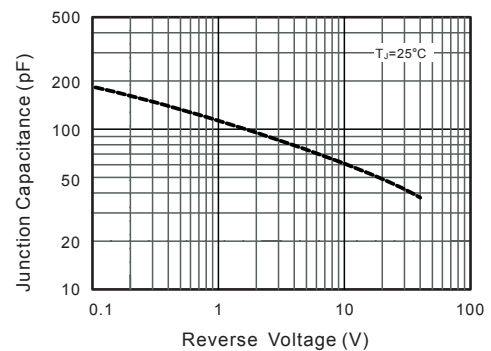


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

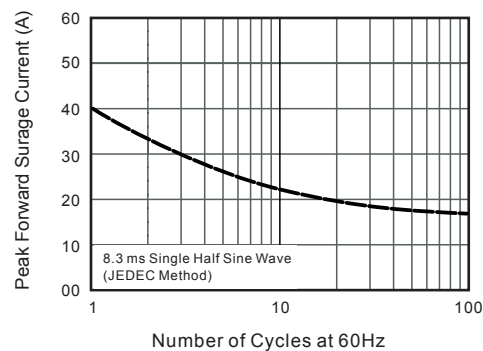
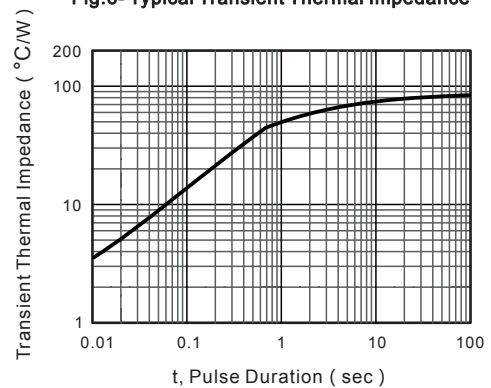


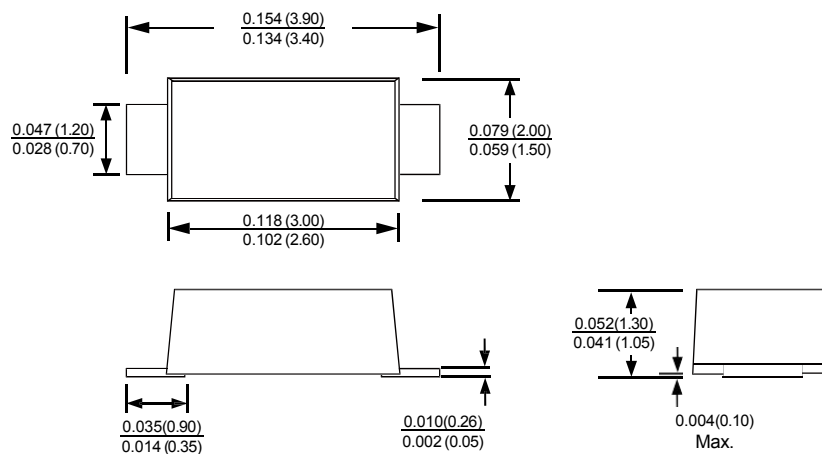
Fig.6- Typical Transient Thermal Impedance



### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

#### SOD-123FL



#### Mounting Pad Layout

