



## Features

- Average Forward Current:  $I_{F(AV)}=1A$
- Polarity: Color band denotes cathode



SOD-123FL



## Package Marking and Ordering Information

| Product ID | Pack      | Marking | Qty(PCS) |
|------------|-----------|---------|----------|
| SK12-SK110 | SOD-123FL | K1x     | 3000     |

x: From 2-10

## Maximum Ratings (Ta=25 °C unless otherwise noted)

Single phase, half wave, 60Hz resistive or inductive load,  
for capacitive load, derate by 20 %

| Type Number                                                                                        | SK12       | SK13 | SK14 | SK15 | SK16 | SK18       | SK19 | SK110 | Units |
|----------------------------------------------------------------------------------------------------|------------|------|------|------|------|------------|------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                             | 20         | 30   | 40   | 50   | 60   | 80         | 90   | 100   | V     |
| Maximum RMS Voltage                                                                                | 14         | 21   | 28   | 35   | 42   | 56         | 63   | 70    | V     |
| Maximum DC Blocking Voltage                                                                        | 20         | 30   | 40   | 50   | 60   | 80         | 90   | 100   | V     |
| Maximum Average Forward Rectified Current                                                          | 1.0        |      |      |      |      |            |      |       | A     |
| See Fig. 1                                                                                         |            |      |      |      |      |            |      |       |       |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 30         |      |      |      |      |            |      |       | A     |
| Maximum Instantaneous Forward Voltage at 1.0A                                                      | 0.55       |      |      | 0.70 |      | 0.85       |      |       | V     |
| Maximum DC Reverse Current Ta=25°C                                                                 | 0.2        |      |      |      |      |            |      |       | mA    |
| at Rated DC Blocking Voltage Ta=100°C                                                              |            |      |      |      |      |            |      |       |       |
| Typical Junction Capacitance (Note1)                                                               | 110        |      |      |      |      |            |      |       | pF    |
| Typical Thermal Resistance RqJA (Note 2)                                                           | 80         |      |      |      |      |            |      |       | °C/W  |
| Operating Temperature Range Tj                                                                     | -65 — +125 |      |      |      |      | -65 — +150 |      |       | °C    |
| Storage Temperature Range Tstg                                                                     | -65 — +150 |      |      |      |      |            |      |       | °C    |

### Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.



## Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

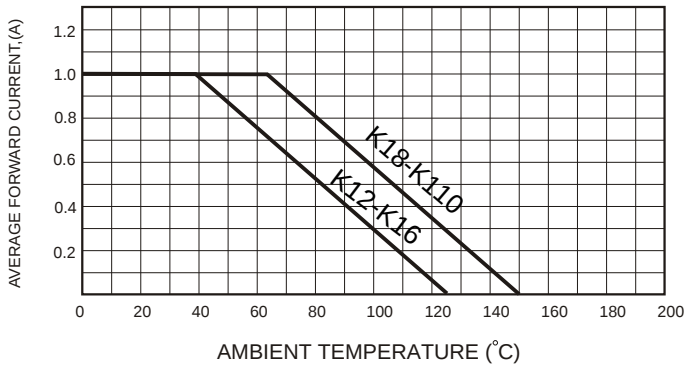


FIG.2-TYPICAL FORWARD

CHARACTERISTICS

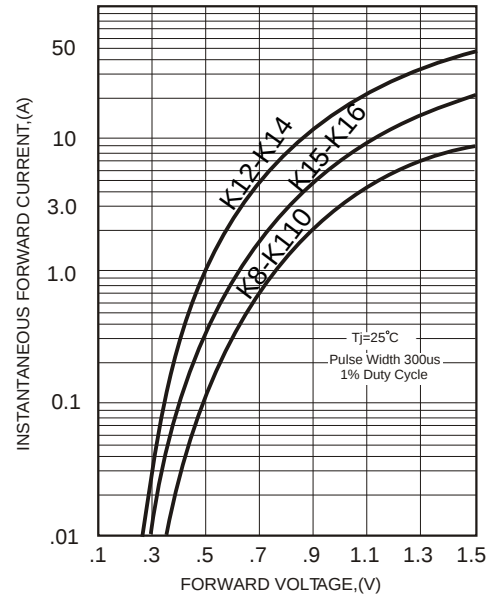


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

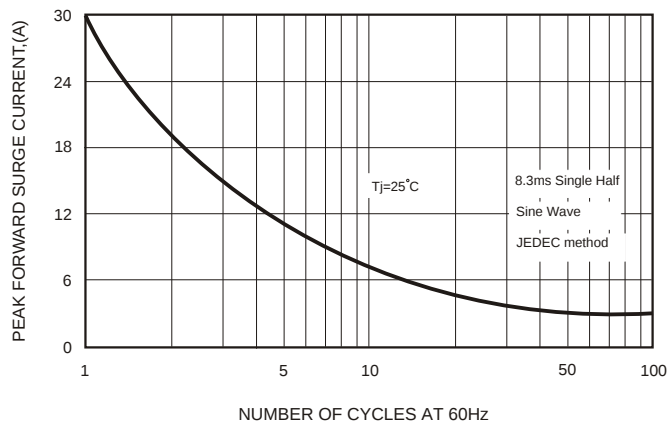


FIG.5 - TYPICAL REVERSE

CHARACTERISTICS

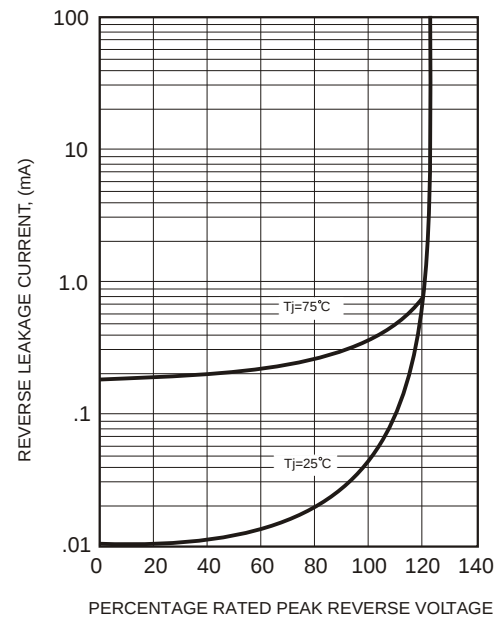
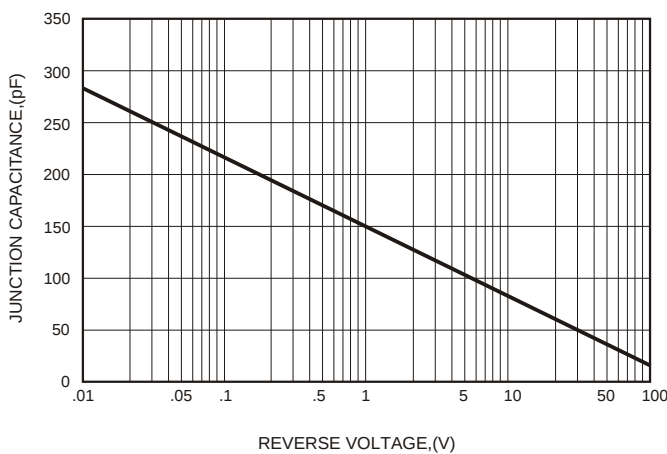
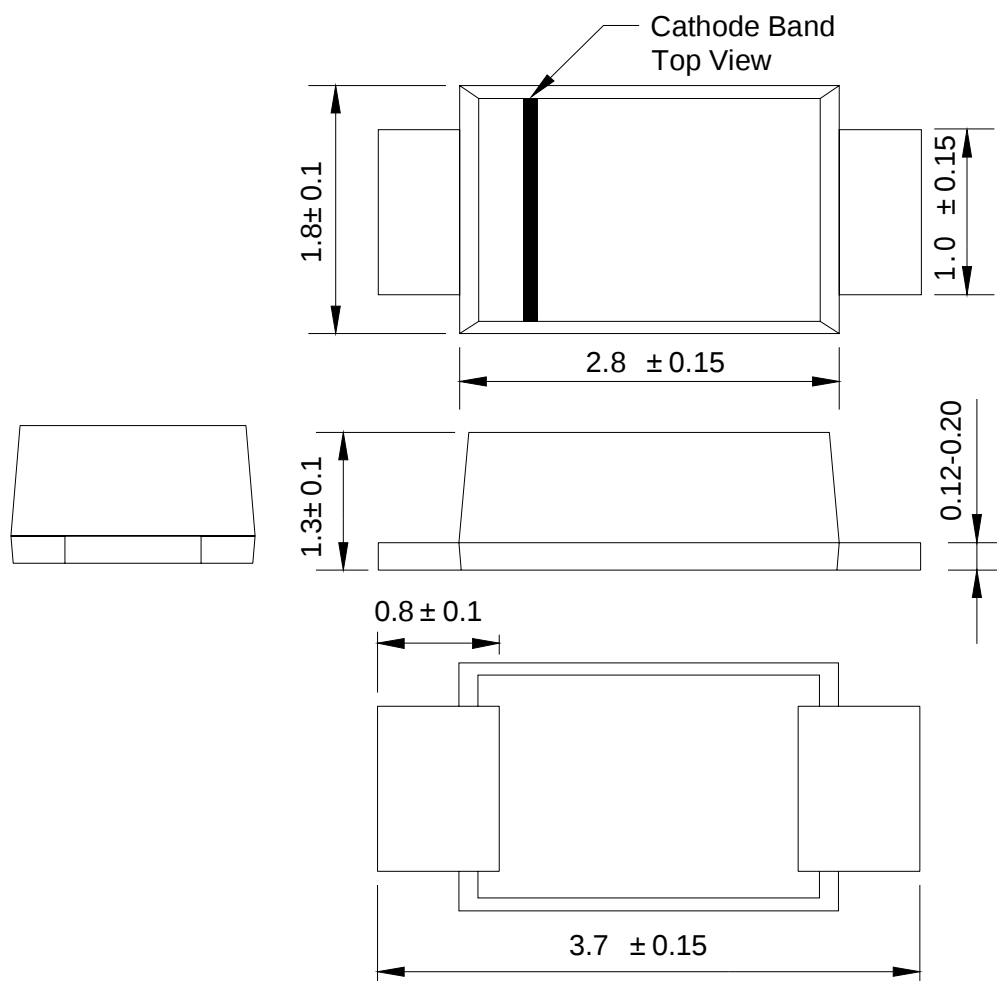


FIG.4-TYPICAL JUNCTION CAPACITANCE





## SOD-123FL Package Outline Dimensions





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