



## FEATURES

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



SOD-123F

## Package Marking and Ordering Information

| Product ID | Pack     | Marking | Qty(PCS) |
|------------|----------|---------|----------|
| SOD4007    | SOD-123F | A7      | 3000     |



## MAXIMUM RATINGS (Ta=25 unless otherwise noted)

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

| TYPE NUMBER   | SOD4007  | UNITS |
|---|----------|-------|
| Maximum Recurrent Peak Reverse Voltage  | 1000     | V     |
| Maximum RMS Voltage   | 700      | V     |
| Maximum DC Blocking Voltage   | 1000     | V     |
| Maximum Average Forward Rectified Current<br>at Ta=75°C   | 1.0      | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 25       | A     |
| Maximum Instantaneous Forward Voltage at 1.0A   | 1.1      | V     |
| Maximum DC Reverse Current Ta=25°C  | 5.0      | μA    |
| at Rated DC Blocking Voltage Ta=100°C   | 50       | μA    |
| Typical Junction Capacitance (Note 1)   | 15       | pF    |
| Typical Thermal Resistance R <sub>JA</sub> (Note 2)   | 80       | °C/W  |
| Operating and Storage Temperature Range T <sub>J</sub> , T <sub>STG</sub>                             | -65—+150 | °C    |

### NOTES:

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



### Typical Characteristics

FIG.1-TYPICAL FORWARD CHARACTERISTICS

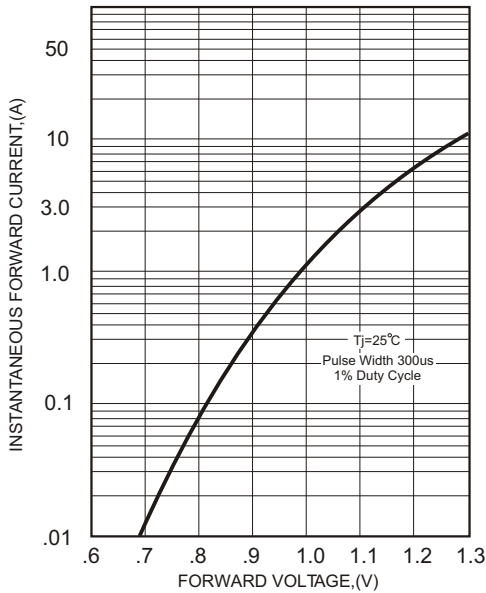


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

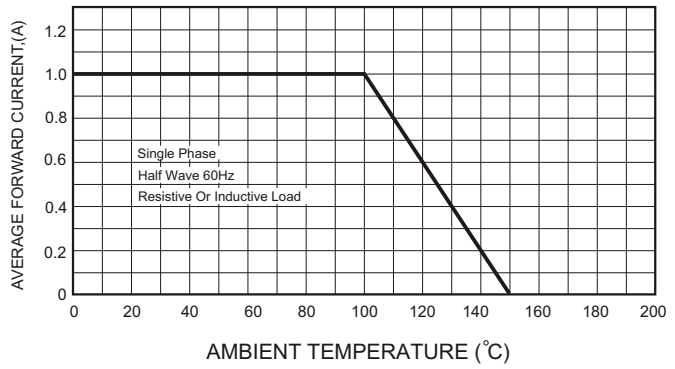


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

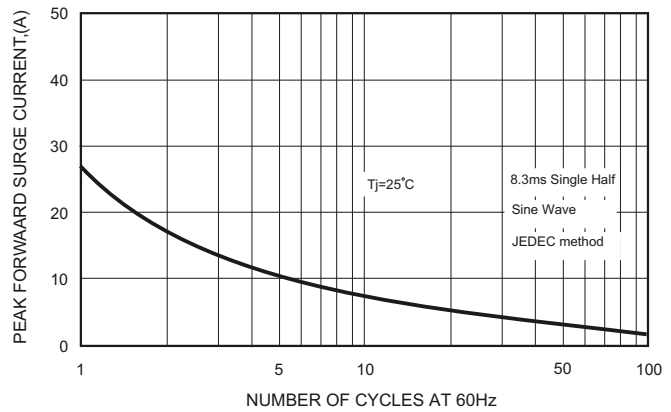


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

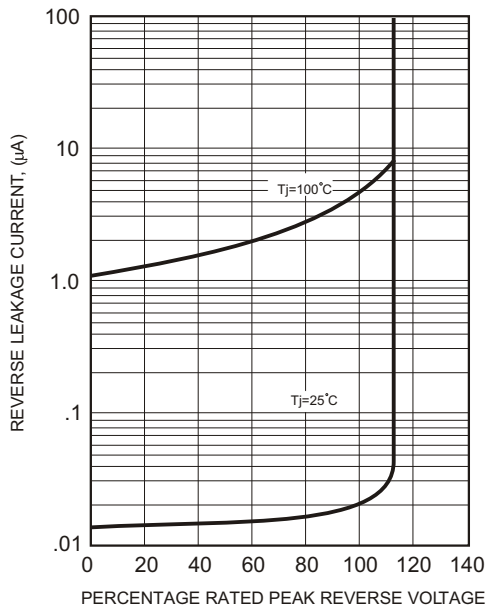
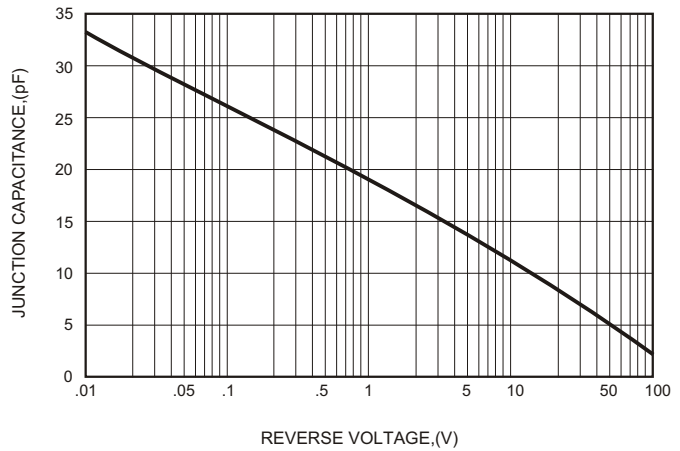
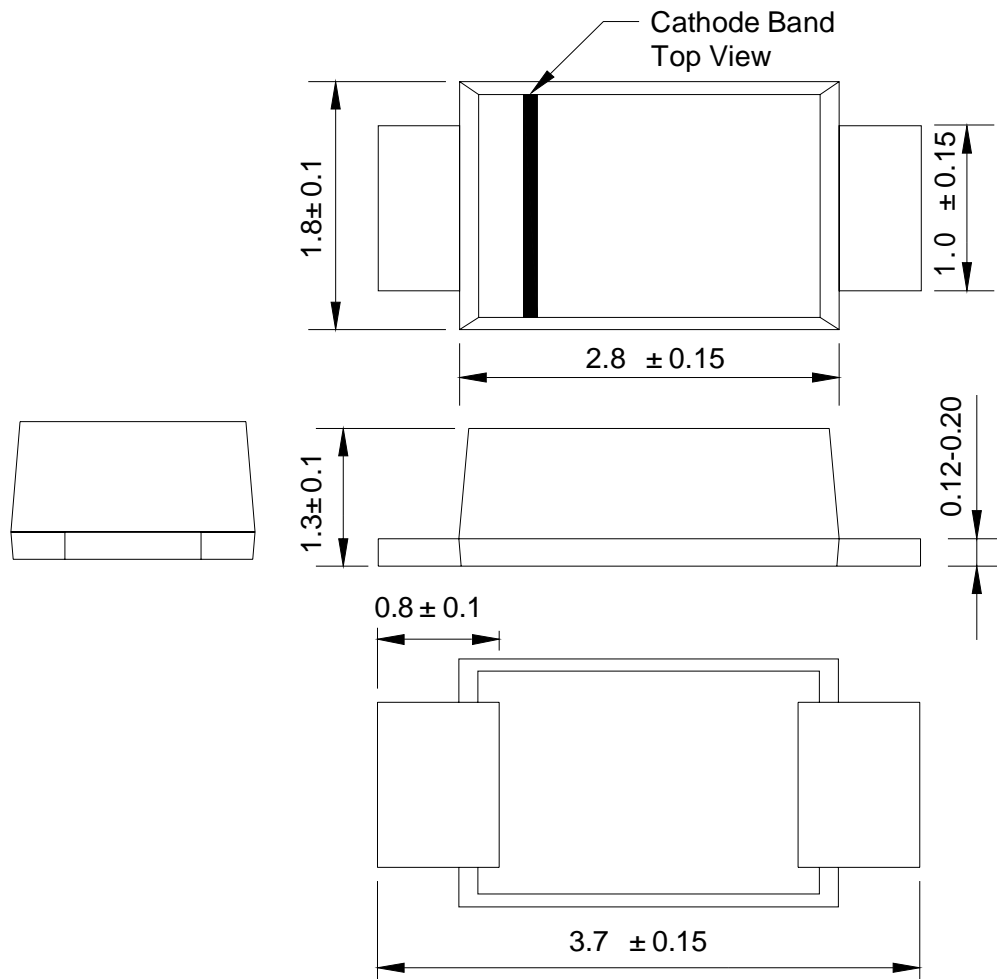


FIG.5-TYPICAL JUNCTION CAPACITANCE





### SOD-123F Package Outline Dimensions





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