

## SURFACE MOUNT SCHOTTKY BARRIER DIODES

**VOLTAGE** 20 to 40 Volts

**CURRENT** 0.35 Amperes

### FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.

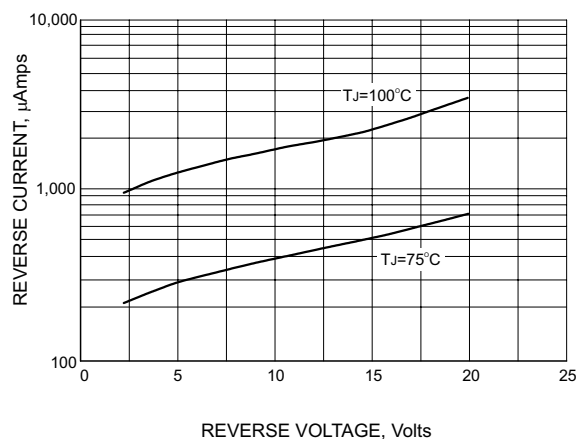
### MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram Below
- Approx. Weight: 0.008 grams
- Mounting Position: Any

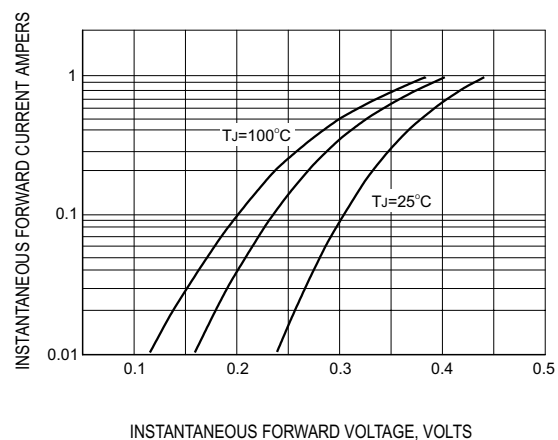


### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

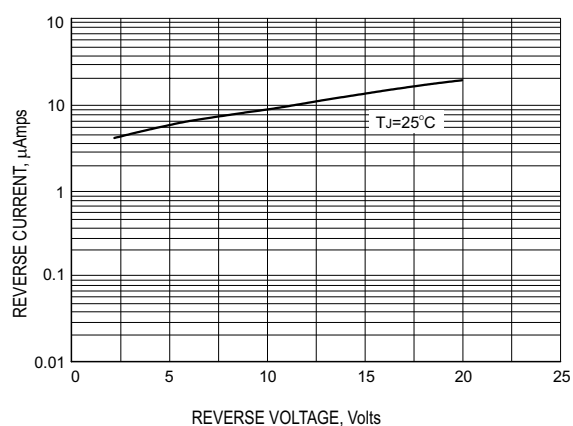
| Parameter                                                                                         | Symbol                             | SD103AW      | SD103BW      | SD103CW      | Units           |
|---------------------------------------------------------------------------------------------------|------------------------------------|--------------|--------------|--------------|-----------------|
| Maximum Recurrent Peak Reverse Voltage                                                            | $V_{RRM}$                          | 40           | 30           | 20           | V               |
| Maximum RMS Voltage                                                                               | $V_{RMS}$                          | 28           | 21           | 14           | V               |
| Maximum DC Blocking Voltage                                                                       | $V_{DC}$                           | 40           | 30           | 20           | V               |
| Maximum Average Forward Current at $T_a=25^{\circ}C$                                              | $I_{AV}$                           | 0.35         | 0.35         | 0.35         | A               |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$                          | 2.0          | 2.0          | 2.0          | A               |
| Maximum Instantaneous Forward Voltage at 0.2A<br>0.02A                                            | $V_F$                              | 0.60<br>0.37 | 0.60<br>0.37 | 0.60<br>0.37 | V               |
| Maximum DC Reverse Current at Rated DC Blocking Voltage                                           | $I_R$                              | 0.005        | 0.005        | 0.005        | mA              |
| Maximum Thermal Resistance                                                                        | $R_{\theta JL}$<br>$R_{\theta JA}$ |              | 215<br>300   |              | $^{\circ}C / W$ |
| Operating Junction Temperature Range                                                              | $T_J$                              |              | -55 TO +125  |              | $^{\circ}C$     |
| Storage Temperature Range                                                                         | $T_{STG}$                          |              | -55 TO +125  |              | $^{\circ}C$     |



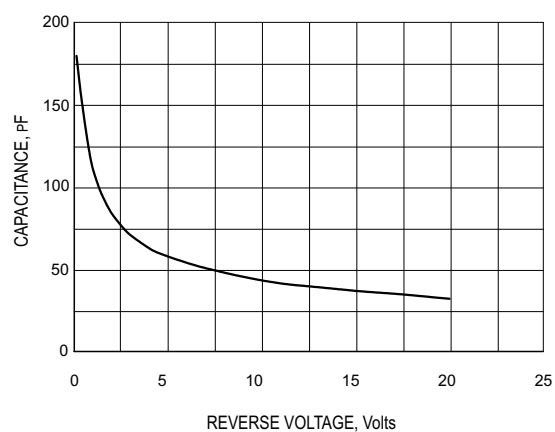
**TYPICAL REVERSE CURRENT**



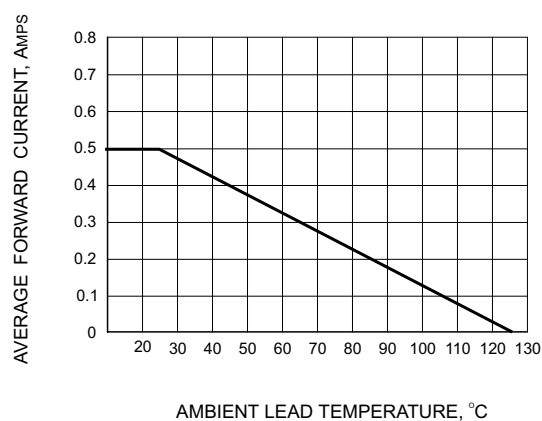
**TYPICAL FORWARD VOLTAGE**



**TYPICAL REVERSE CURRENT**

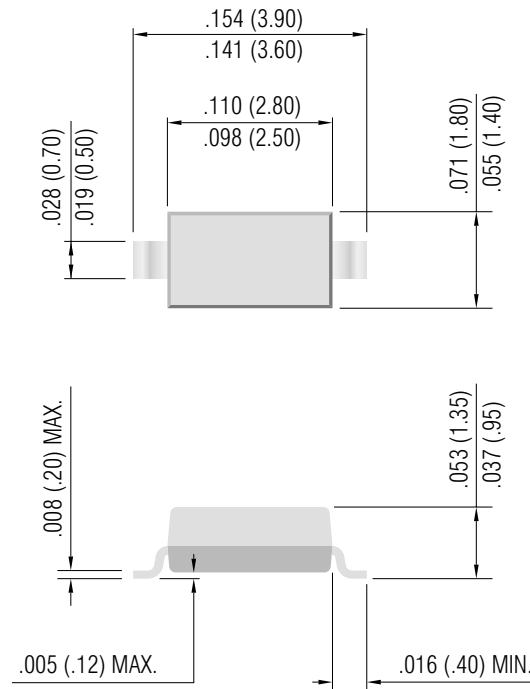


**TYPICAL JUNCTION CAPACITANCE**



**CURRENT DERATING**

## SOD-123



Dimensions in inches and (millimeters)

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**PanJit International Inc.**

TEL:886-7-6213121 Fax:886-7-6213129 Internet: <http://www.panjit.com.tw> email: [sales@panjit.com.tw](mailto:sales@panjit.com.tw)