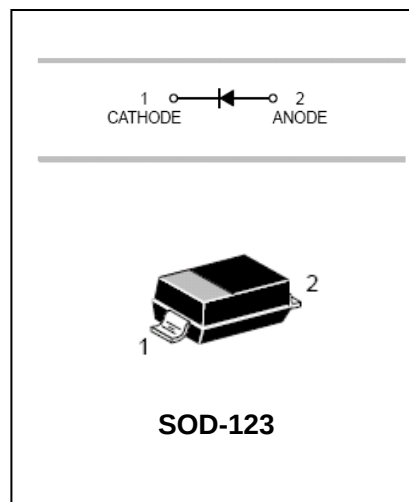


## FEATURES

- Low Forward Voltage Drop.
- Guard Ring Construction For Transient Protection.
- Negligible Reverse Recovery Time.
- Low Reverse Capacitance.

## APPLICATIONS

- Schottky barrier switching.



## ORDERING INFORMATION

| Type No.       | Marking | Package Code |
|----------------|---------|--------------|
| SD103AW-HE3-08 | S4      | SOD-123      |
| SD103BW        | S5      | SOD-123      |
| SD103CW        | S6      | SOD-123      |

## MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Parameter                                       | Symbol          | SD103AW  | SD103BW | SD103CW | Unit |
|-------------------------------------------------|-----------------|----------|---------|---------|------|
| Peak Repetitive Peak reverse voltage            | $V_{RR}$        |          |         |         |      |
| Working Peak                                    | $V_{RWM}$       | 40       | 30      | 20      | V    |
| DC Reverse Voltage                              | $V_R$           |          |         |         |      |
| RMS Reverse Voltage                             | $V_{R(RMS)}$    | 28       | 21      | 14      | V    |
| Forward Continuous Current                      | $I_F$           | 350      |         |         | mA   |
| Repetitive Peak Forward Current @ $t \leq 1.0s$ | $I_{FRM}$       | 1.5      |         |         | A    |
| Power Dissipation                               | $P_d$           | 400      |         |         | mW   |
| Thermal Resistance Junction to Ambient          | $R_{\theta JA}$ | 300      |         |         | °C/W |
| Storage temperature                             | $T_{stg}$       | -65~+125 |         |         | °C   |

## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Parameter                     |                               | Symbol      | Min.           | Typ. | Max.         | Unit    | Conditions                                               |
|-------------------------------|-------------------------------|-------------|----------------|------|--------------|---------|----------------------------------------------------------|
| Reverse Breakdown Voltage     | SD103AW<br>SD103BW<br>SD103CW | $V_{(BR)R}$ | 40<br>30<br>20 |      |              | V       | $I_R=10\mu A$<br>$I_R=10\mu A$<br>$I_R=10\mu A$          |
| Forward voltage               |                               | $V_F$       |                |      | 0.37<br>0.60 | V       | $I_F=20mA$<br>$I_F=200mA$                                |
| Reverse current               | SD103AW<br>SD103BW<br>SD103CW | $I_{RM}$    |                |      | 5.0          | $\mu A$ | $V_R=30V$<br>$V_R=20V$<br>$V_R=10V$                      |
| Capacitance between terminals |                               | $C_T$       |                | 50   |              | pF      | $V_R=0, f=1MHz$                                          |
| Reverse Recovery Time         |                               | $t_{rr}$    |                | 10   |              | ns      | $I_R=I_F=200mA$<br>$I_{rr}=0.1 \cdot I_R, R_L=100\Omega$ |

# TYPICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified

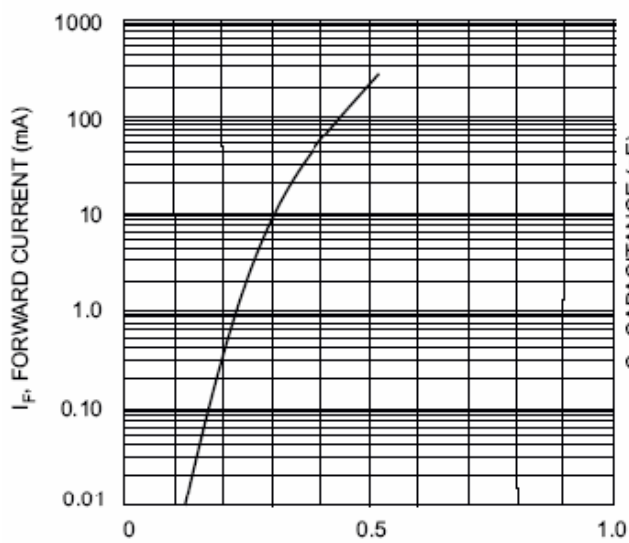


Fig. 1 Typical Forward Characteristics

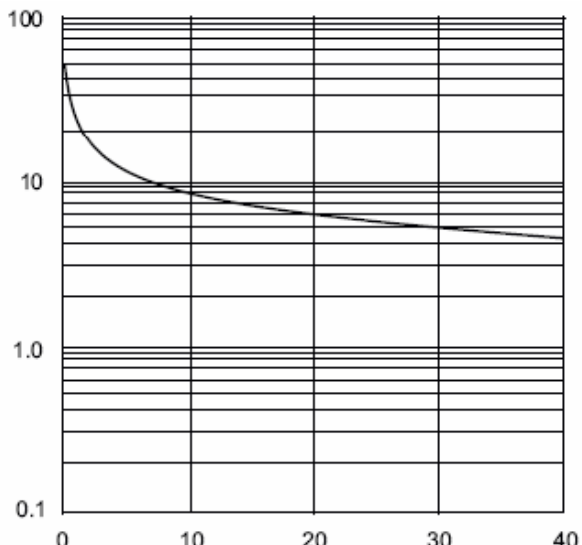
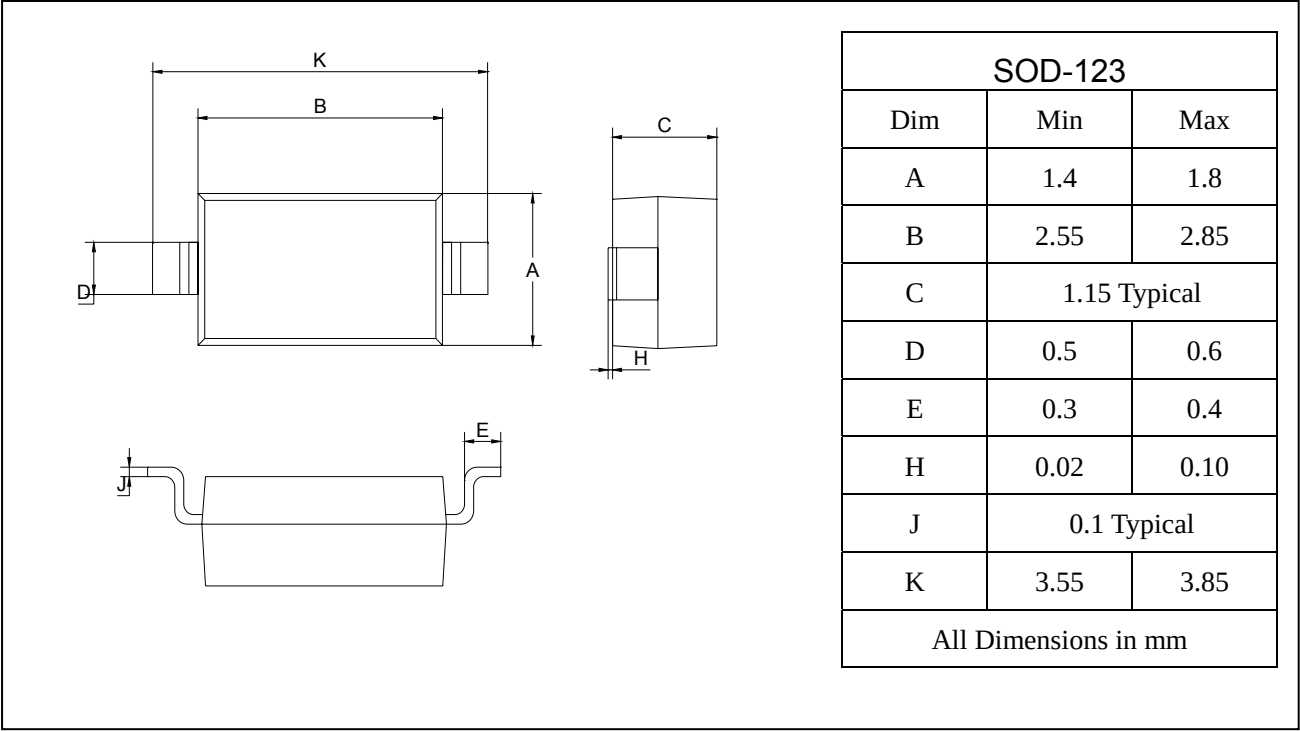


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

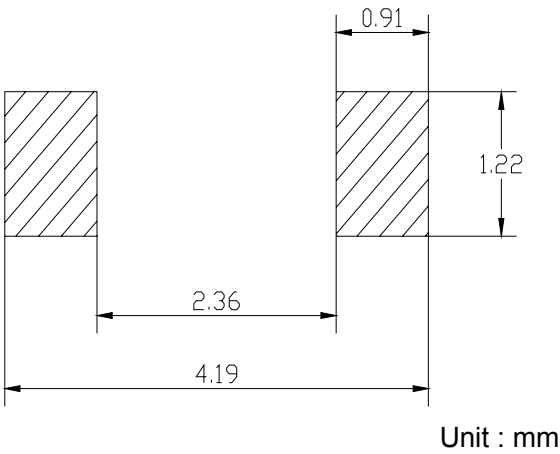
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



PACKAGE INFORMATION

|                 |         |                |
|-----------------|---------|----------------|
| Device          | Package | Shipping       |
| SD103AW-SD103CW | SOD-123 | 3000/Tape&Reel |