



# SD103AW

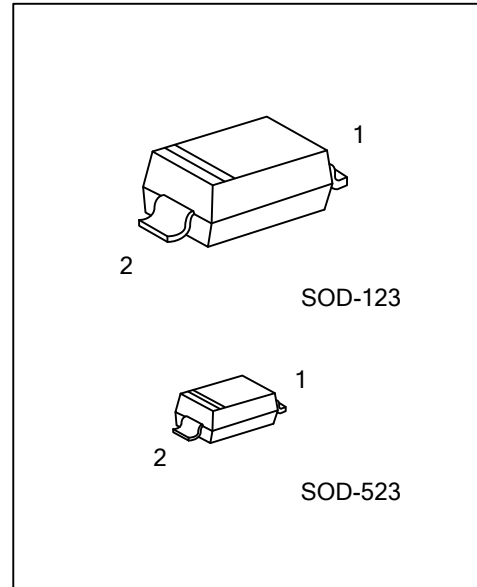
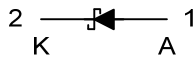
**DIODE**

## SCHOTTKY BARRIER SWITCHING DIODE

### ■ FEATURES

- \* Low Forward Voltage Drop
- \* Fast Switching
- \* Negligible Reverse Recovery Time
- \* Low Reverse Capacitance
- \* Designed for Surface Mount Application
- \* PN Junction Guard Ring for Transient and ESD Protection

### ■ SYMBOL



### ■ ORDERING INFORMATION

| Order Number   | Package | Pin Assignment |   | Packing   |
|----------------|---------|----------------|---|-----------|
|                |         | 1              | 2 |           |
| SD103AWG-CA2-R | SOD-123 | A              | K | Tape Reel |
| SD103AWG-CC2-R | SOD-523 | A              | K | Tape Reel |

Note: Pin Assignment: A: Anode K: Cathode

|   |   |
|---|---|
| <p>SD103AWG-CA2-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Green Package</li> </ul> | <ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) CA2: SOD-123, CC2: SOD-523</li> <li>(3) G: Halogen Free and Lead Free</li> </ul> |
|---|---|

### ■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (Single Diode @  $T_A=25^\circ\text{C}$ , unless otherwise specified)

| PARAMETER   | SYMBOL       | RATINGS  | UNIT             |
|---|--------------|----------|------------------|
| Maximum repetitive Peak Reverse Voltage                       | $V_{RRM}$    | 40       | V                |
| Maximum DC Blocking Voltage                                   | $V_R$        | 40       | V                |
| Working Peak Reverse Voltage                                  | $V_{RWM}$    | 40       | V                |
| Maximum RMS Reverse Voltage                                   | $V_{R(RMS)}$ | 28       | V                |
| Forward Continuous Current                                    | $I_{FM}$     | 350      | mA               |
| Non-Repetitive Peak Forward Current at $t_p \leq 1.0\text{s}$ | $I_{FSM}$    | 1.5      | A                |
| Power Dissipation   | $P_D$        | 400      | mW               |
| Storage Temperature   | $T_{STG}$    | -65~+125 | $^\circ\text{C}$ |

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

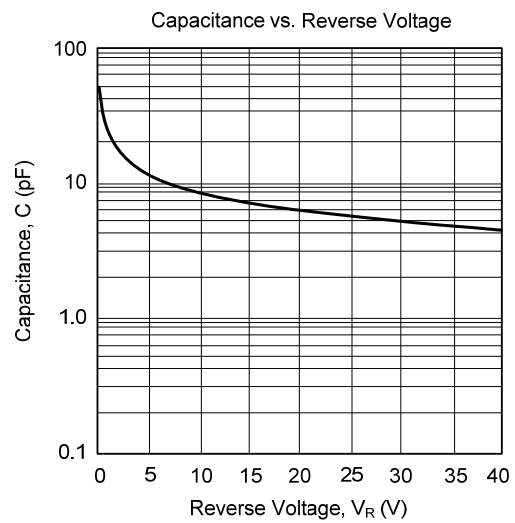
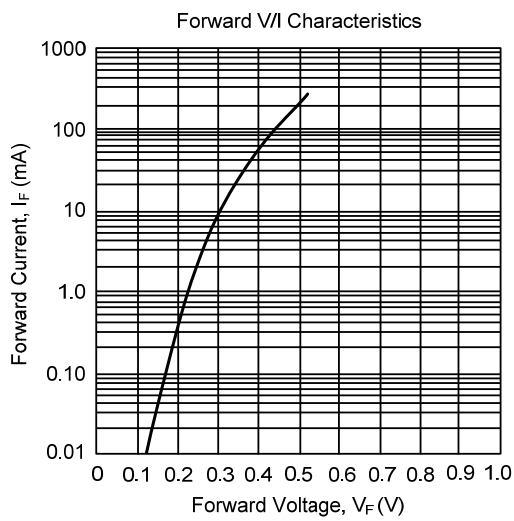
■ THERMAL DATA

| PARAMETER                              | SYMBOL        | RATINGS | UNIT               |
|--|---------------|---------|--------------------|
| Thermal Resistance Junction to Ambient | $\theta_{JA}$ | 300     | $^\circ\text{C/W}$ |

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ , unless otherwise specified)

| PARAMETER                     | SYMBOL   | CONDITIONS   | MIN | TYP | MAX  | UNIT          |
|-------------------------------|----------|--|-----|-----|------|---------------|
| Forward Voltage Drop          | $V_F$    | $I_F=20\text{mA}$  |     |     | 0.37 | V             |
|                               |          | $I_F=200\text{mA}$   |     |     | 0.60 | V             |
| Reverse Breakdown Voltage     | $BV_R$   | $I_R=10\mu\text{A}$  | 40  |     |      | V             |
| Peak Reverse Leakage Current  | $I_{RM}$ | $V_R=30\text{V}$   |     |     | 5.0  | $\mu\text{A}$ |
| Typical Reverse Recovery Time | $t_{RR}$ | $I_F=I_R=50\sim 200\text{mA}$ , $R_L=100\Omega$<br>recover to $0.1 \times I_R$ |     | 10  |      | ns            |
| Typical Junction Capacitance  | $C_T$    | $V_R=0\text{V}$ , $f=1.0\text{MHz}$  |     | 50  |      | pF            |

## ■ TYPICAL CHARACTERISTICS



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