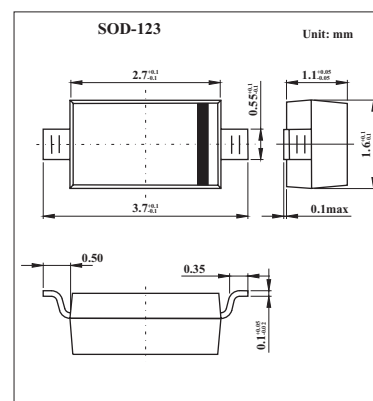


## Schottky Barrier Switching Diodes

KD103AW - KD103CW  
(SD103AW-SD103CW)

## ■ Features

- Low forward voltage drop.
- Guard ring construction for transient protection.
- Negligible reverse recovery time.

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

| Parameter                                                        | Symbol          | KD103AW     | KD103BW | KD103CW | Unit               |
|------------------------------------------------------------------|-----------------|-------------|---------|---------|--------------------|
| Peak repetitive peak reverse voltage                             | $V_{RRM}$       |             |         |         |                    |
| Working peak                                                     | $V_{RWM}$       | 40          | 30      | 20      | V                  |
| DC blocking voltage                                              | $V_R$           |             |         |         |                    |
| RMS reverse voltage                                              | $V_{R(RMS)}$    | 28          | 21      | 14      | V                  |
| Forward continuous current                                       | $I_{FM}$        | 350         |         |         | mA                 |
| Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0\text{s}$ | $I_{FRM}$       | 1.5         |         |         | A                  |
| Power dissipation                                                | $P_d$           | 400         |         |         | mW                 |
| Thermal resistance junction to ambient                           | $R_{\theta JA}$ | 300         |         |         | $^\circ\text{C/W}$ |
| Storage temperature                                              | $T_{stg}$       | -65 to +125 |         |         | $^\circ\text{C}$   |

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

| Parameter                 | Symbol      | Test conditions                                                       | Min | Typ | Max  | Unit          |
|---------------------------|-------------|-----------------------------------------------------------------------|-----|-----|------|---------------|
| Reverse breakdown voltage | $V_{(BR)R}$ | $I_R = 100 \mu\text{A}$                                               | 40  |     |      | V             |
|                           |             |                                                                       | 30  |     |      |               |
|                           |             |                                                                       | 20  |     |      |               |
| Forward Voltage Drop      | $V_{FM}$    | $I_F = 20\text{mA}$                                                   |     |     | 0.37 | V             |
|                           |             | $I_F = 200\text{mA}$                                                  |     |     | 0.60 |               |
| Peak Reverse Current      | $I_{RM}$    | $V_R = 30\text{V}$                                                    |     |     | 5    | $\mu\text{A}$ |
|                           |             | $V_R = 20\text{V}$                                                    |     |     |      |               |
|                           |             | $V_R = 10\text{V}$                                                    |     |     |      |               |
| Total Capacitance         | $C_T$       | $V_R = 0\text{V}, f = 1.0\text{MHz}$                                  |     | 50  |      | pF            |
| Reverse Recovery Time     | $t_{rr}$    | $I_F = I_R = 200\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$ |     | 10  |      | ns            |

## ■ Marking

| NO.     | KD103AW | KD103BW  | KD103CW        |
|---------|---------|----------|----------------|
| Marking | S4      | S5 or S4 | S6 or S5 or S4 |