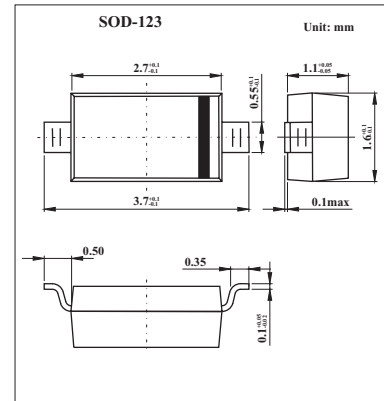


Schottky Barrier Switching Diodes

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 | | | $^\circ\text{C}/\text{W}$ |
| 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 | KD103AW | $I_R = 100 \mu\text{A}$ | 40 | | | V |
| | KD103BW | | 30 | | | |
| | KD103CW | | 20 | | | |
| Forward Voltage Drop | V_{FM} | $I_F = 20\text{mA}$ | | | 0.37 | V |
| | | $I_F = 200\text{mA}$ | | | 0.60 | |
| Peak Reverse Current | KD103AW | $V_R = 30\text{V}$ | | | 5 | μA |
| | KD103BW | $V_R = 20\text{V}$ | | | | |
| | KD103CW | $V_R = 10\text{V}$ | | | | |
| 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 |