



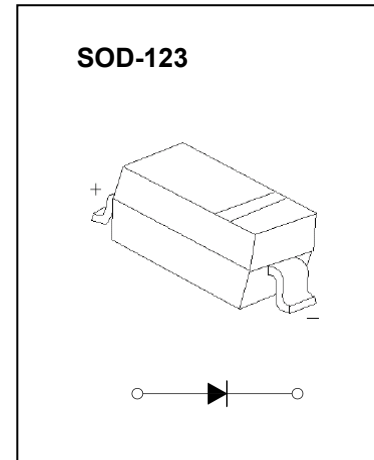
SOD-123 Plastic-Encapsulate Diodes

SD103AW-SD103CW SCHOTTKY BARRIER DIODE

FEATURES

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

MARKING: SD103AW: S4
SD103BW: S5
SD103CW: S6



Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

| Parameter | Symbol | SD103AW | SD103BW | SD103CW | Unit |
|---|-----------------|----------|---------|---------|------|
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | | | | |
| Working Peak Reverse Voltage | 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 |
| Repetitive Peak Forward Current @t≤1.0s | I_{FRM} | 1.5 | | | A |
| Power Dissipation | P_d | 500 | | | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 250 | | | °C/W |
| Storage Temperature | T_{STG} | -55~+150 | | | °C |

Electrical Ratings @Ta=25°C

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|-------------|-----|-----|--------------|---------|---|
| Reverse breakdown voltage | $V_{(BR)R}$ | 40 | | | V | $I_R=100\mu A$ |
| | | 30 | | | | $I_R=100\mu A$ |
| | | 20 | | | | $I_R=100\mu A$ |
| Forward voltage | V_F | | | 0.37 0.60 | V | $I_F=20mA$ $I_F=200mA$ |
| Reverse current | I_{RM} | | | 5.0 | μA | $V_R=30V$ $V_R=20V$ $V_R=10V$ |
| Capacitance between terminals | C_T | | 50 | | pF | $V_R=0V, f=1.0MHz$ |
| Reverse recovery time | t_{rr} | | 10 | | ns | $I_F=I_R=200mA$ $I_{rr}=0.1I_R, R_L=100\Omega$ |



Typical Characteristics

SD103AW

