

Schottky Barrier Diode

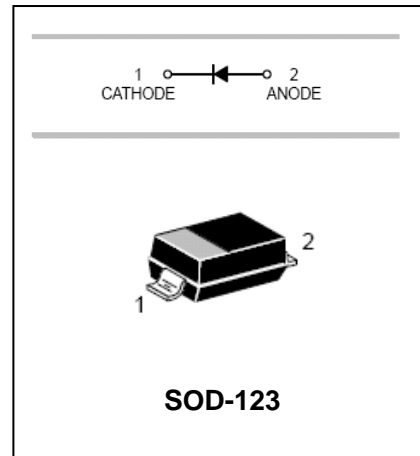
SD101AW/SD101BW/SD101CW

FEATURES

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



Lead-free



APPLICATIONS

- Schottky barrier switching.

ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| SD101AW | S1 | SOD-123 |
| SD101BW | S2 | SOD-123 |
| SD101CW | S3 | SOD-123 |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Parameter | Symbol | SD101AW | SD101BW | SD101CW | Unit |
|--|-----------------|----------|---------|---------|------|
| Peak Repetitive Peak reverse voltage | V_{RR} | | | | |
| Working Peak DC Reverse Voltage | V_{RWM} | 60 | 50 | 40 | V |
| | V_R | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 42 | 35 | 28 | V |
| Forward Continuous Current | I_{FM} | 15 | | | mA |
| Repetitive Peak Forward Current @t<1.0s @t=10μs | I_{FRM} | 50 | | | mA |
| | | 2.0 | | | 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 |

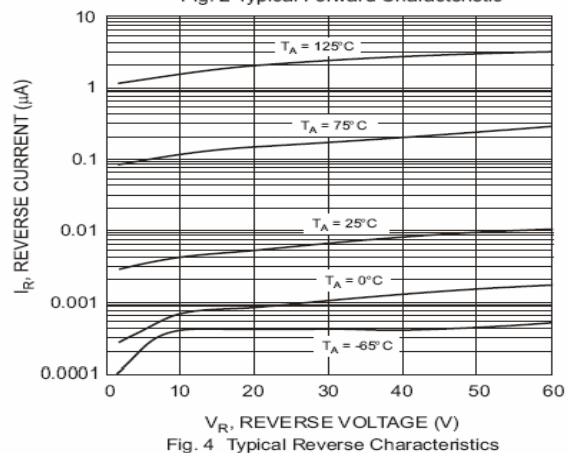
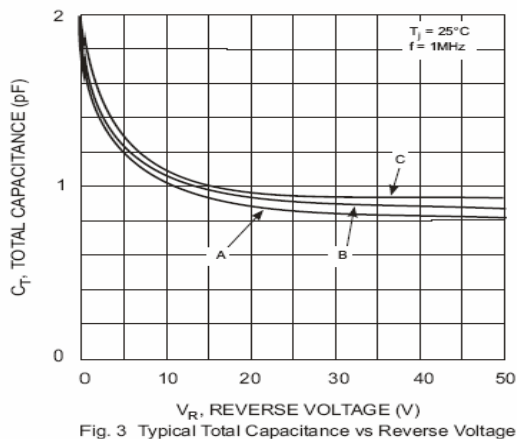
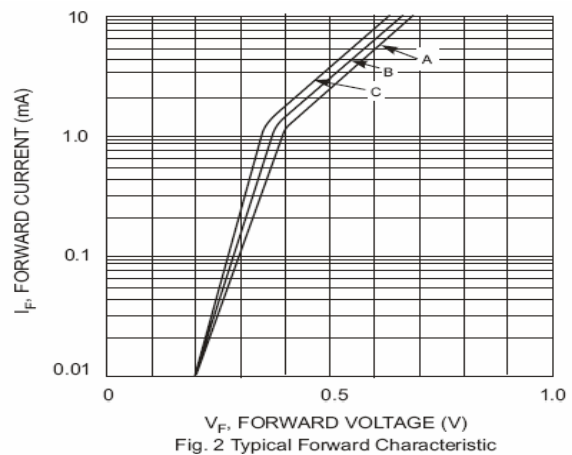
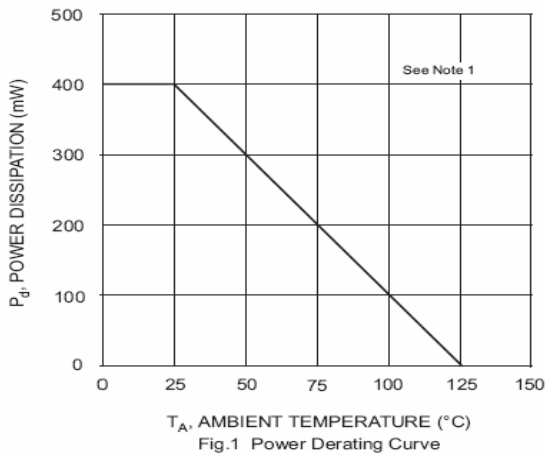
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Schottky Barrier Diode

SD101AW/SD101BW/SD101CW

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|--|-------------|----------------|--|---------|---|
| Reverse Breakdown Voltage | SD101AW SD101BW SD101CW | $V_{(BR)R}$ | 60 50 40 | | V | $I_R=10\mu A$ $I_R=10\mu A$ $I_R=10\mu A$ |
| Forward voltage | SD101AW SD101BW SD101CW SD101AW SD101BW SD101CW | V_F | | 0.41 0.40 0.39 1.00 0.95 0.90 | V | $I_F=1.0mA$ $I_F=1.0mA$ $I_F=1.0mA$ $I_F=15mA$ $I_F=15mA$ $I_F=15mA$ |
| Reverse current | SD101AW SD101BW SD101CW | I_{RM} | | 0.2 | μA | $V_R=50V$ $V_R=40V$ $V_R=30V$ |
| Capacitance between terminals | SD101AW SD101BW SD101CW | C_T | | 2.0 2.1 2.2 | pF | $V_R=0, f=1MHz$ |
| Reverse Recovery Time | | t_{rr} | | 1.0 | ns | $I_R=I_F=5mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$ |

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



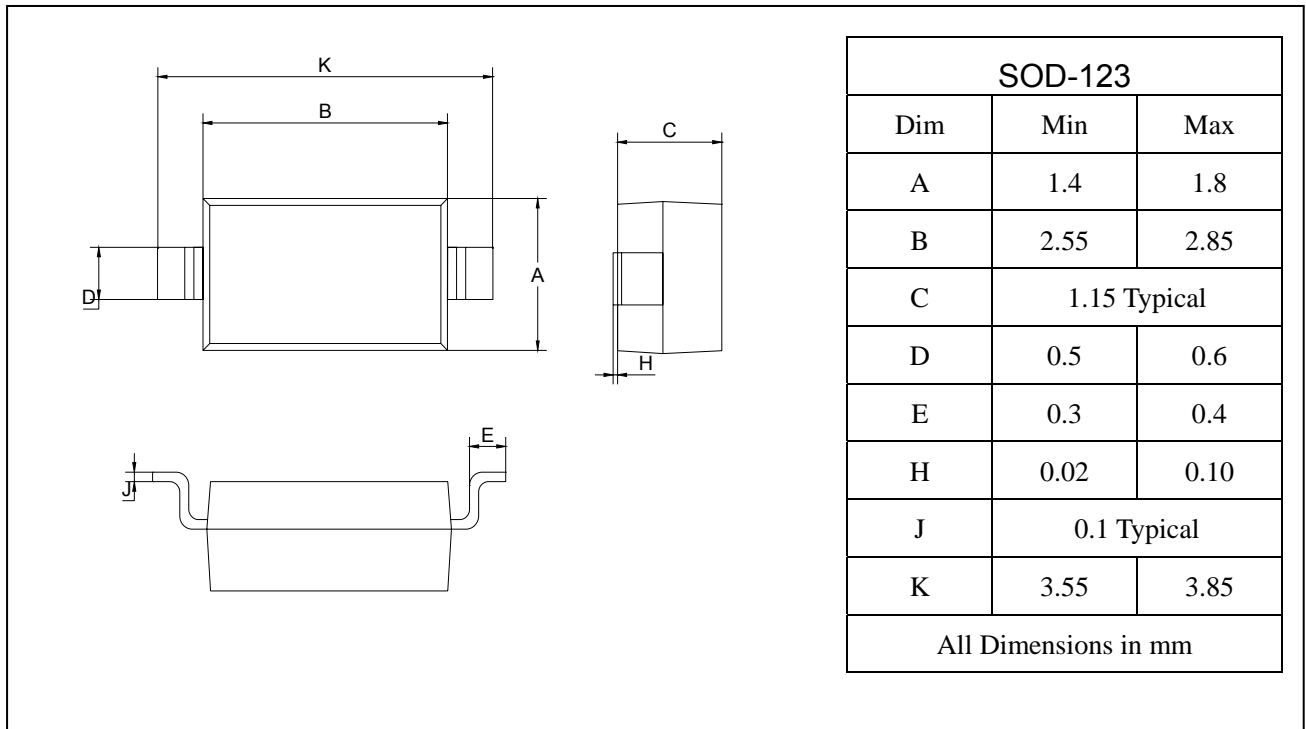
Schottky Barrier Diode

SD101AW/SD101BW/SD101CW

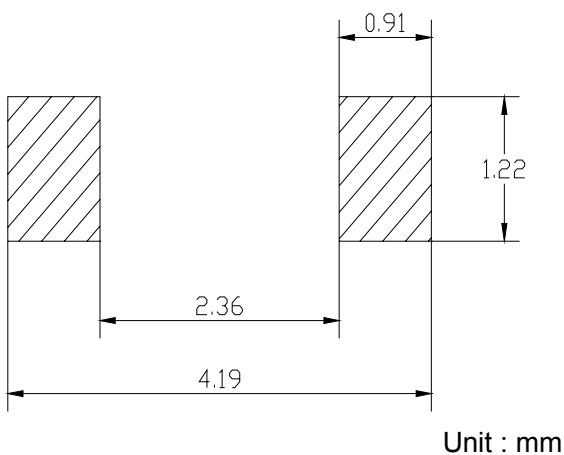
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



PACKAGE INFORMATION

| Device | Package | Shipping |
|-----------------|---------|----------------|
| SD101AW-SD101CW | SOD-123 | 3000/Tape&Reel |