

SD103AWS...SD103CWS

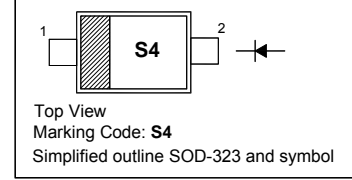
Surface Mount Schottky Barrier Diodes

Features

- Low Forward Voltage

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



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

| Parameter | Symbol | Value | Unit | |
|---|----------------|----------------------------------|------------------|----|
| Peak Repetitive Reverse Voltage | V_{RRM} | SD103AWS SD103BWS SD103CWS | 40 30 20 | V |
| Reverse Voltage | | SD103AWS SD103BWS SD103CWS | 40 30 20 | V |
| Average Forward Rectified Current | | $I_{F(AV)}$ | 350 | mA |
| Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$ | I_{FSM} | 2 | A | |
| Power Dissipation | P_{tot} | 200 | mW | |
| Operating and Storage Temperature Range | T_j, T_{stg} | - 65 to + 125 | $^\circ\text{C}$ | |

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

| Parameter | Symbol | Min. | Typ. | Max. | Unit | |
|--|-------------|----------------------------------|----------------------------------|-------------|-------------|---------------|
| Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$ | $V_{(BR)R}$ | SD103AWS SD103BWS SD103CWS | 40 30 20 | - - - | V | |
| Reverse Leakage Current at $V_R = 30\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 10\text{ V}$ | | I_R | SD103AWS SD103BWS SD103CWS | - - - | 5 5 5 | μA |
| Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$ | | | V_F | - - | - - | 0.37 0.6 |
| Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$ | C_T | | | - | 50 | - |
| Reverse Recovery Time at $I_F = I_R = 200\text{ mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\text{ }\Omega$ | t_{rr} | - | 10 | - | ns | |

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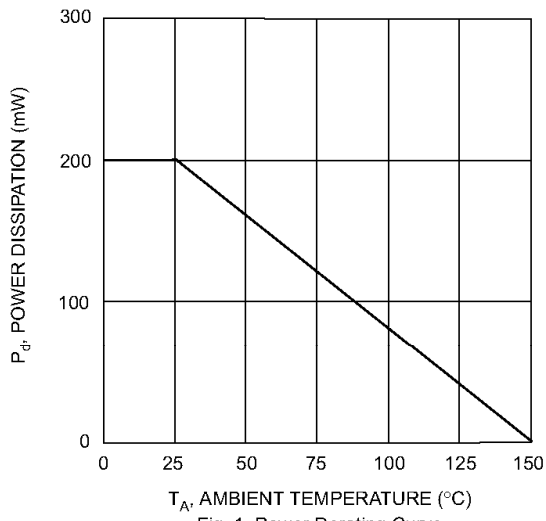


Fig. 1 Power Derating Curve

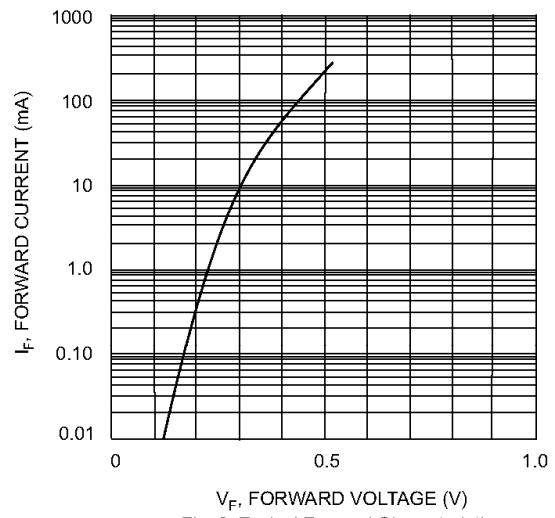


Fig. 2 Typical Forward Characteristics

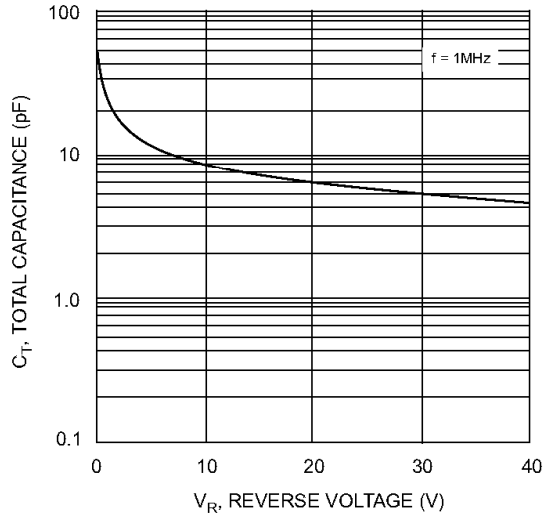


Fig. 3 Total Capacitance vs Reverse Voltage

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ISO14001 : 2004 Certificate No. 121505007 ISO 9001 : 2008 Certificate No. 50114012 OHSAS 18001 : 2007 Certificate No. 05131508008 IECQ QC 080000 Certificate No. EQH10007 H.002

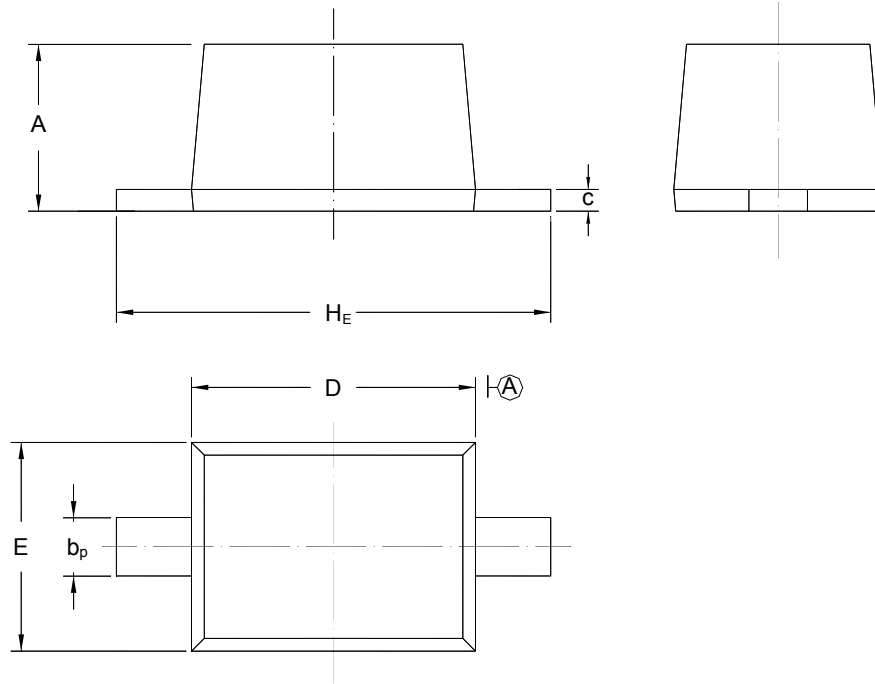
Dated : 29/10/2012

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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



| UNIT | A | b _p | C | D | E | H _E |
|------|--------------|----------------|--------------|--------------|--------------|----------------|
| mm | 1.10 0.80 | 0.40 0.25 | 0.15 0.10 | 1.80 1.60 | 1.35 1.15 | 2.80 2.30 |

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