

350mA Small Single Surface Mounted Schottky Diode

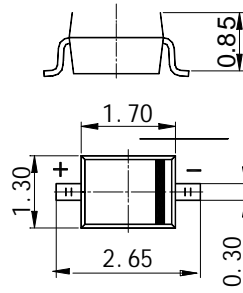
Description

Mechanical Dimensions

SD103CWS



SOD-323



Unit: mm

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance

MARKING: SD103AWS: S4
SD103BWS: S5
SD103CWS: S6

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

| Parameter | Symbol | SD103AWS | SD103BWS | SD103CWS | Unit |
|---|---------------------|----------|----------|----------|------|
| Peak Repetitive Peak reverse voltage | V _{RRM} | | | | |
| Working Peak DC Blocking Voltage | V _{RWM} | 40 | 30 | 20 | V |
| 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 | 200 | | | mW |
| Thermal Resistance Junction to Ambient | R _{θJA} | 300 | | | °C/W |
| Storage temperature | T _{STG} | -65~+125 | | | °C |

Electrical Ratings @T_A=25°C

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|--------------------|------|------|--------------|------|--|
| Reverse Breakdown Voltage | V _{(BR)R} | 40 | | | V | IR=10μA |
| SD103AWS | | 30 | | | | IR=10μA |
| SD103BWS | | 20 | | | | IR=10μA |
| Forward voltage | V _F | | | 0.37 0.60 | V | I _F =20mA I _F =200mA |
| Reverse current | I _{RM} | | | 5.0 | | μA |
| SD103AWS | | | | | | |
| SD103BWS | | | | | | |
| 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} =0.1X I _R , R _L =100Ω |



Typical Characteristics

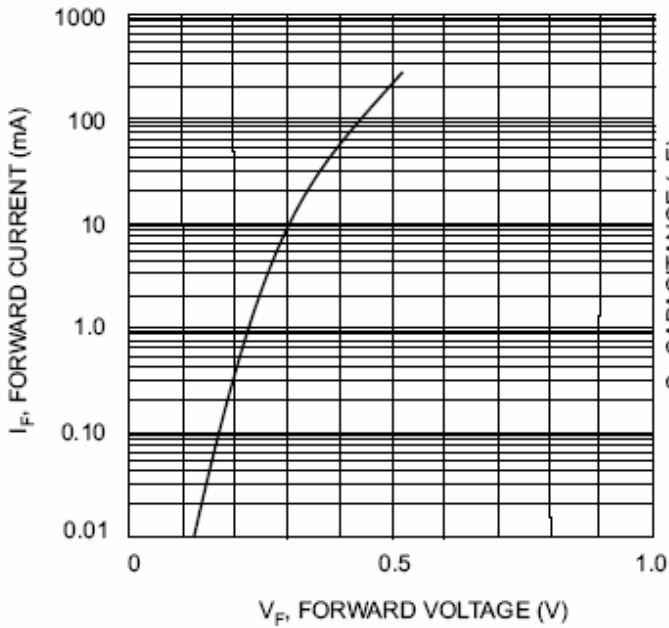


Fig. 1 Typical Forward Characteristics

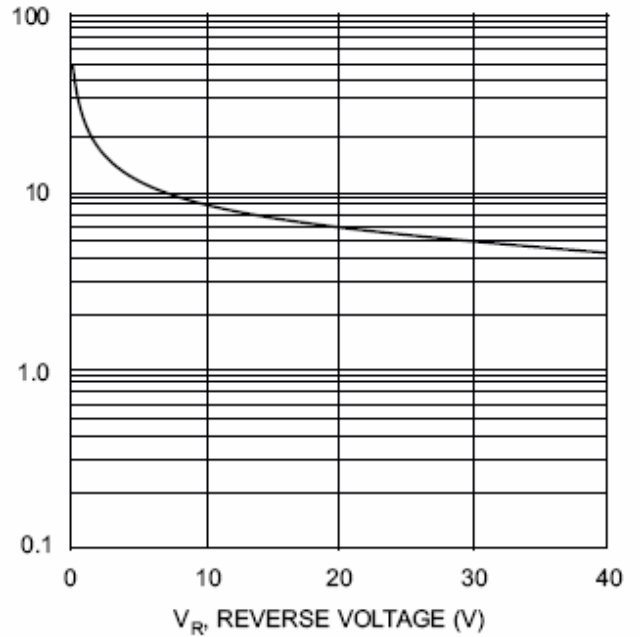


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage