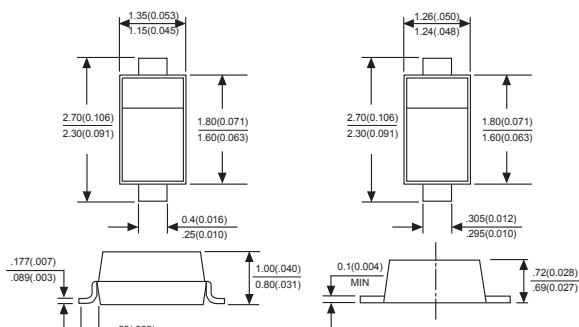


# SD103AWS-SD103CWS

## SCHOTTKY DIODES

### SOD-323



Dimensions in millimeters and (inches)

### FEATURES

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

### MECHANICAL DATA

**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols marked on case

**Mounting Position:** Any

**Marking:** SD103AWS:S4, SD103BWS:S5, SD103CWS:S6

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum ratings and electrical characteristics, Single diode @T<sub>A</sub>=25°C

| PARAMETER                               | SYMBOLS             | SD103AWS | SD103BWS    | SD103CWS | UNITS |
|-----------------------------------------|---------------------|----------|-------------|----------|-------|
| Peak repetitive peak reverse voltage    | V <sub>RRM</sub>    |          |             |          | VOLTS |
| Working peak reverse voltage            | V <sub>RMS</sub>    | 40       | 30          | 20       |       |
| DC Blocking voltage                     | V <sub>DC</sub>     |          |             |          |       |
| RMS Reverse voltage                     | V <sub>R(RMS)</sub> | 28       | 21          | 14       | V     |
| Forward continuous current              | I <sub>FM</sub>     |          | 350         |          | mA    |
| Repetitive peak forward current @t≤1.0s | I <sub>FRM</sub>    |          | 1.5         |          | A     |
| Power dissipation                       | P <sub>d</sub>      |          | 200         |          | mW    |
| Thermal resistance junction to ambient  | R <sub>θJA</sub>    |          | 300         |          | °C/W  |
| Storage temperature                     | T <sub>STG</sub>    |          | -65 to +125 |          | °C    |

Electrical ratings @T<sub>A</sub>=25°C

| PARAMETER                     | SYMBOLS                          | Min.           | Typ. | Max.         | Unit | Conditions                                                                                        |
|-------------------------------|----------------------------------|----------------|------|--------------|------|---------------------------------------------------------------------------------------------------|
| Reverse breakdown voltage     | SD103AWS<br>SD103BWS<br>SD103CWS | 40<br>30<br>20 |      |              | V    | IR=10μA<br>IR=10μA<br>IR=10μA                                                                     |
| Foward voltage                | V <sub>F</sub>                   |                |      | 0.37<br>0.60 | V    | I <sub>F</sub> =20mA<br>I <sub>F</sub> =200mA                                                     |
| Reverse current               | SD103AWS<br>SD103BWS<br>SD103CWS |                |      | 5.0          | μA   | V <sub>R</sub> =30V<br>V <sub>R</sub> =20V<br>V <sub>R</sub> =10V                                 |
| Capacitance between terminals | C <sub>T</sub>                   |                | 50   |              | pF   | V <sub>R</sub> =0V,f=1.0MHz                                                                       |
| Reverse recovery time         | t <sub>rr</sub>                  |                | 10   |              | ns   | I <sub>F</sub> =I <sub>R</sub> =200mA<br>I <sub>rr</sub> =0.1I <sub>R</sub> ,R <sub>L</sub> =100Ω |

RATINGS AND CHARACTERISTIC CURVES SD103AWS-SD103CWS

FIG. 1- TYPICAL FORWARD CHARACTERISTICS

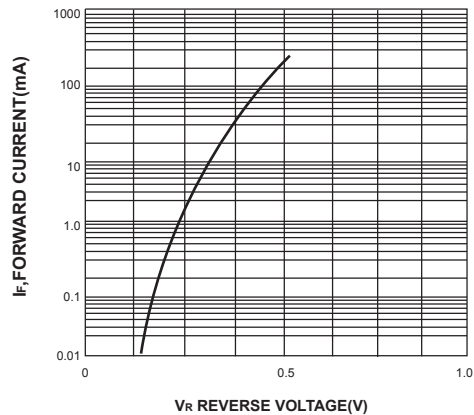


FIG. 2-TYP. JUNCTION CAPACITANCE VS REVERSE VOLTAGE

