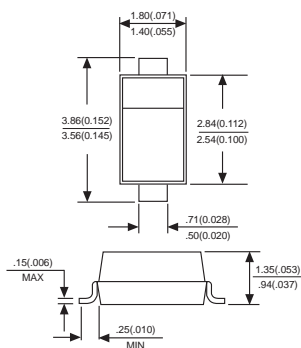


# SD103AW-SD103CW

## SCHTTKY DIODES

### SOD-123



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:** SD103AW:S4, SD103BW:S5, SD103CW:S6

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| PARAMETER                               | SYMBOLS             | SD103AW | SD103BW     | SD103CW | UNITS |
|---|---------------------|---------|-------------|---------|-------|
| Peak repetitive peak reverse voltage    | V <sub>RRM</sub>    |         |             |         | VOLTS |
| Working peak reverse voltage            | V <sub>RWM</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>      |         | 400         |         | 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     | SD103AW<br>SD103BW<br>SD103CW<br>V <sub>(BR)R</sub> | 40<br>30<br>20 |      |              | V    | IR=100uA<br>IR=100uA<br>IR=100uA   |
| Forward voltage               | V <sub>F</sub>                                      |                |      | 0.37<br>0.60 | V    | I <sub>F</sub> =20mA<br>I <sub>F</sub> =200mA  |
| Reverse current               | SD103AW<br>SD103BW<br>SD103CW<br>I <sub>RM</sub>    |                |      | 5.0          | uA   | 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> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω |

# RATINGS AND CHARACTERISTIC CURVES SD103AW-SD103CW

FIG. 1- TYPICAL FORWARD CHARACTERISTICS

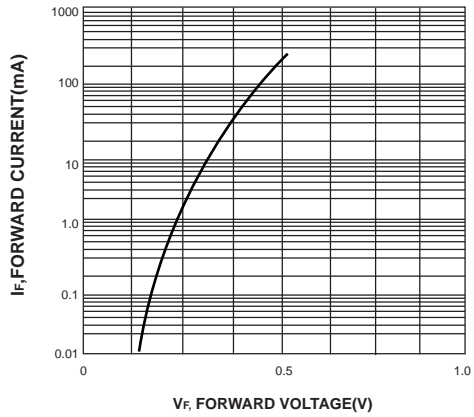


FIG. 2-TYP. JUNCTION CAPACITANCE VS REVERSE VOLTAGE

