

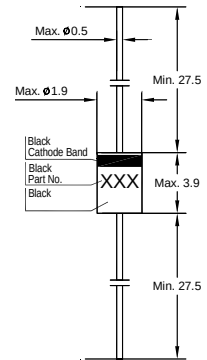
## SD101A (1N6263)...SD101C

### SILICON SCHOTTKY BARRIER DIODES for general purpose applications

The SD101 Series is a metal on silicon Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.

The SD101A is equivalent to the 1N6263.

This diode is also available in MiniMELF case with type designation LL101A, B, C.



Glass Case DO-35  
Dimensions in mm

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

| Parameter                                          | Symbol    | Value             | Unit             |
|----------------------------------------------------|-----------|-------------------|------------------|
| Peak Reverse Voltage<br>SD101A<br>SD101B<br>SD101C | $V_{RRM}$ | 60<br>50<br>40    | V                |
| Power Dissipation                                  | $P_{tot}$ | 400 <sup>1)</sup> | mW               |
| Maximum Single Cycle Surge, 10 s Square wave       | $I_{FSM}$ | 2                 | A                |
| Junction Temperature                               | $T_j$     | 200               | $^\circ\text{C}$ |
| Storage Temperature Range                          | $T_s$     | - 55 to + 200     | $^\circ\text{C}$ |

<sup>1)</sup> Valid provided the leads direct at the case are kept at ambient temperature.

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

| Parameter                                                                                                                              | Symbol      | Min.                       | Max.                                    | Unit |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|-----------------------------------------|------|
| Reverse Breakdown Voltage<br>at $I_R = 10\ \mu\text{A}$<br>SD101A<br>SD101B<br>SD101C                                                  | $V_{(BR)R}$ | 60<br>50<br>40             | -<br>-<br>-                             | V    |
| Forward Voltage<br>at $I_F = 1\ \text{mA}$<br>SD101A<br>SD101B<br>SD101C<br><br>at $I_F = 15\ \text{mA}$<br>SD101A<br>SD101B<br>SD101C | $V_F$       | -<br>-<br>-<br>-<br>-<br>- | 0.41<br>0.4<br>0.39<br>1<br>0.95<br>0.9 | V    |
| Reverse Leakage Current<br>at $V_R = 50\ \text{V}$<br>at $V_R = 40\ \text{V}$<br>at $V_R = 30\ \text{V}$<br>SD101A<br>SD101B<br>SD101C | $I_R$       | -                          | 200                                     | nA   |
| Junction Capacitance<br>at $V_R = 0\ \text{V}$ , $f = 1\ \text{MHz}$<br>SD101A<br>SD101B<br>SD101C                                     | $C_{tot}$   | -<br>-<br>-                | 2<br>2.1<br>2.2                         | pF   |
| Reverse Recovery Time<br>at $I_F = I_R = 5\ \text{mA}$ , recover to $0.1\ I_R$                                                         | $t_{rr}$    | -                          | 1                                       | ns   |

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