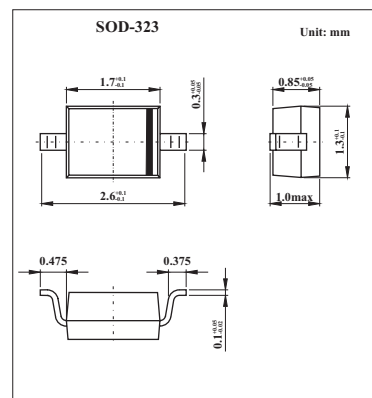


## SCHOTTKY DIODE

### SD106WS

#### ■ Features

- Low turn-on voltage
- Fast switching
- Microminiature plastic package
- These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge.
- Ideal for protection of MOS devices, steering, blasing, and coupling diodes for fast switching and low logic level applications.



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

| Parameter                                   | Symbol          | Value       | Unit               |
|---|-----------------|-------------|--------------------|
| Continuous Reverse Voltage                  | $V_R$           | 30          | Volts              |
| Forward Current                             | $I_F$           | 200         | mA                 |
| Forward Surge Current, $t_p = 10\text{ ms}$ | $I_{FSM}$       | 1.0         | A                  |
| Power Dissipation $T_c = 25^\circ\text{C}$  | $P_{tot}$       | 250(Note 1) | mW                 |
| Thermal Resistance Junction to Ambient Air  | $R_{\theta JA}$ | 500         | $^\circ\text{C/W}$ |
| Junction Temperature                        | $T_J$           | 150         | $^\circ\text{C}$   |
| Storage Temperature Range                   | $T_s$           | -65 to +150 | $^\circ\text{C}$   |

Note:

1. Valid provided that electrodes are kept at ambient temperature

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

| Characteristic   | Symbol    | Min | Typ | Max | Unit          |
|--|-----------|-----|-----|-----|---------------|
| Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$        | $BV_R$    | 30  |     |     | Volts         |
| Leakage Current at $V_R = 30\text{ V}$                             | $I_R$     |     |     | 5.0 | $\mu\text{A}$ |
| Forward Voltage at $I_F = 2.1\text{ mA}$                           | $V_F$     |     | 260 |     | mV            |
| Forward Voltage at $I_F = 15\text{ mA}$                            |           |     | 320 |     |               |
| Forward Voltage at $I_F = 100\text{ mA}$                           |           |     | 420 |     |               |
| Forward Voltage at $I_F = 200\text{ mA}$                           |           |     | 490 | 550 |               |
| Junction Capacitance at $V_R = 10\text{ V}$ , $f = 1.0\text{ MHz}$ | $C_{tot}$ |     |     | 15  | pF            |

#### ■ Marking

|         |    |
|---------|----|
| Marking | S2 |
|---------|----|