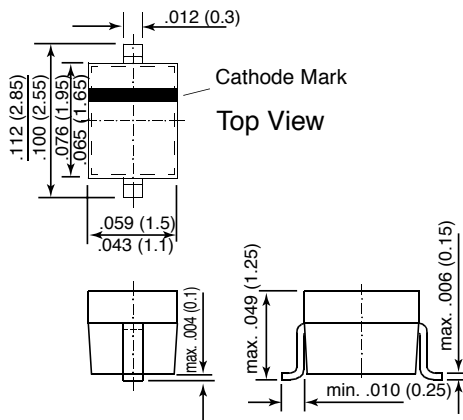


SD107WS

SCHOTTKY DIODES

SOD-323

Dimensions in inches and (millimeters)

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, biasing, and coupling diodes for fast switching and low logic level applications.

**MECHANICAL DATA****Case:** SOD-323 Plastic Package**Weight:** approx. 0.004g**Marking Code:** S1**MAXIMUM RATINGS**

Ratings at 25°C ambient temperature unless otherwise specified

| | SYMBOL | VALUE | UNIT |
|--|-----------------|--------------|---------------------------|
| Continuous Reverse Voltage | V_R | 30 | Volts |
| Forward Current | I_F | 100 | mA |
| Forward Surge Current, $t_p = 10\text{ms}$ | I_{FSM} | 0.75 | 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 | $^\circ\text{C}/\text{W}$ |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_s | -65 to + 150 | $^\circ\text{C}$ |

NOTES:

(1) Valid provided that electrodes are kept at ambient temperature

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

| | SYMBOL | MIN. | TYP. | MAX. | UNIT |
|--|-----------|------|------|---------|-------|
| Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$ | BV_R | 30 | – | – | Volts |
| Leakage Current at $V_R = 25 \text{ V}$ | I_R | – | – | 1000 | nA |
| Forward Voltage | | | | | |
| at $I_F = 2.0 \text{ mA}$ | V_F | – | 300 | – | mV |
| at $I_F = 15 \text{ mA}$ | V_F | – | 360 | – | mV |
| at $I_F = 50 \text{ mA}$ | V_F | – | 470 | 550 | mV |
| at $I_F = 100\text{mA}$ | V_F | – | 580 | 800 | mV |
| Junction Capacitance at $V_R = 10\text{V}$, $f = 1.0\text{MHz}$ | C_{tot} | – | – | Max 7.0 | pF |