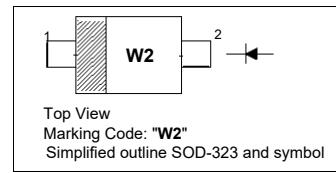


# 1N914WS Silicon Epitaxial Planar Switching Diode

## PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |



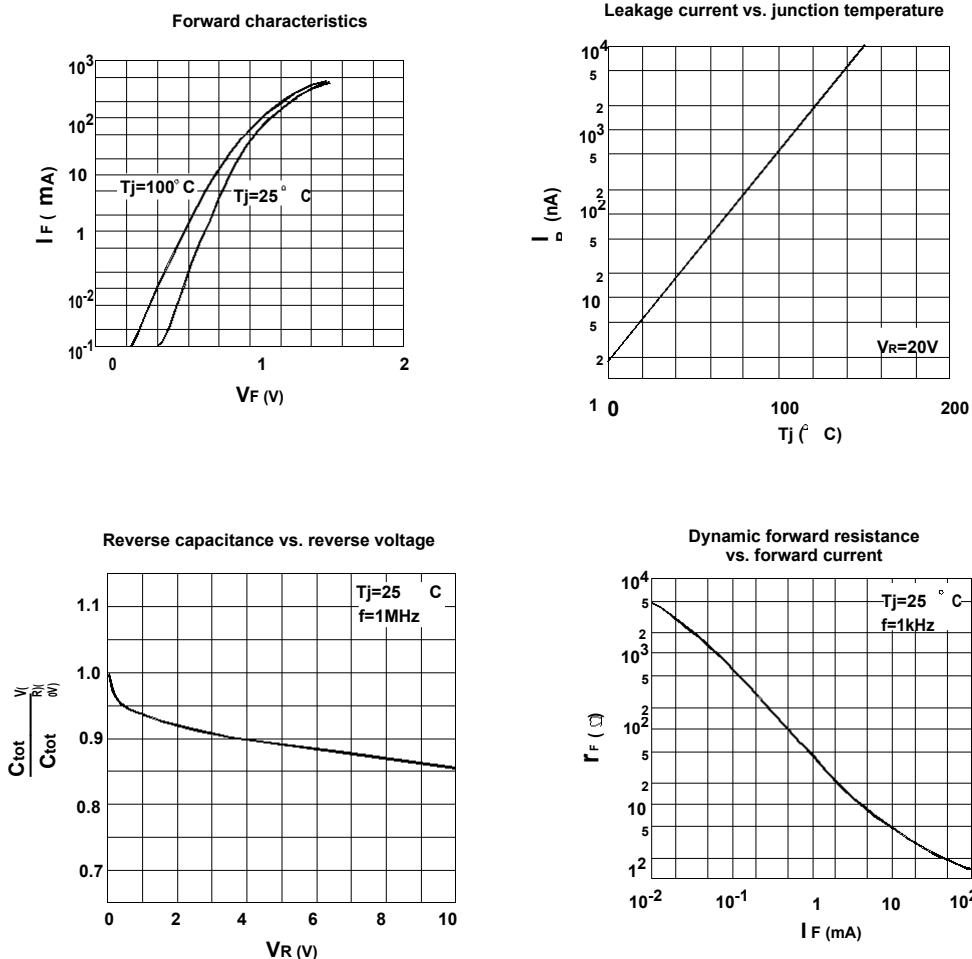
## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter   | Symbol          | Value         | Unit                      |
|---|-----------------|---------------|---------------------------|
| Repetitive Reverse Voltage  | $V_{RRM}$       | 100           | V                         |
| Average Rectified Forward Current   | $I_{F(AV)}$     | 200           | mA                        |
| Non-repetitive Peak Forward Surge Current<br>at $t = 1 \text{ s}$<br>at $t = 1 \mu\text{s}$ | $I_{FSM}$       | 0.5<br>1      | A                         |
| Power Dissipation   | $P_{tot}$       | 200           | mW                        |
| Thermal Resistance Junction to Ambient  | $R_{\theta JA}$ | 625           | $^\circ\text{C}/\text{W}$ |
| Junction Temperature  | $T_j$           | 150           | $^\circ\text{C}$          |
| Storage Temperature Range   | $T_{stg}$       | - 55 to + 150 | $^\circ\text{C}$          |

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

| Parameter   | Symbol                     | Min.        | Max.          | Unit                                 |
|---|----------------------------|-------------|---------------|--------------------------------------|
| Forward Voltage<br>at $I_F = 10 \text{ mA}$   | $V_F$                      | -           | 1             | V                                    |
| Reverse Breakdown Voltage<br>at $I_R = 5 \mu\text{A}$<br>at $I_R = 100 \mu\text{A}$                                       | $V_{(BR)R}$<br>$V_{(BR)R}$ | 75<br>100   | -<br>-        | V                                    |
| Reverse Current<br>at $V_R = 20 \text{ V}$<br>at $V_R = 75 \text{ V}$<br>at $V_R = 20 \text{ V}, T_j = 150^\circ\text{C}$ | $I_R$                      | -<br>-<br>- | 25<br>5<br>50 | nA<br>$\mu\text{A}$<br>$\mu\text{A}$ |
| Total Capacitance<br>at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$  | $C_{tot}$                  | -           | 4             | pF                                   |
| Reverse Recovery Time<br>at $I_F = I_R = 30 \text{ mA}, R_L = 100 \Omega, I_{RR} = 3 \text{ mA}$                          | $t_{rr}$                   | -           | 50            | ns                                   |

## Typical Characteristics



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

