

## Silicon Epitaxial Planar Switching Diode

### Features

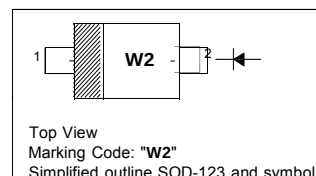
- Low forward voltage
- Fast Reverse Recovery Time
- Small TotalCapacitance

### Application

- Ultra high speed switching

PINNING

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



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

| Parameter                         | Symbol      | Value         | Unit               |
|-----------------------------------|-------------|---------------|--------------------|
| Maximum (Peak) Reverse Voltage    | $V_{RM}$    | 85            | V                  |
| Reverse Voltage                   | $V_R$       | 80            | V                  |
| Average Rectified Forward Current | $I_{F(AV)}$ | 100           | mA                 |
| Maximum (Peak) Forward Current    | $I_{FM}$    | 200           | mA                 |
| Surge Forward Current (10 ms)     | $I_{FSM}$   | 1             | A                  |
| Power Dissipation                 | $P_{tot}$   | 350           | mW                 |
| Junction Temperature              | $T_j$       | 150           | $^{\circ}\text{C}$ |
| Storage Temperature Range         | $T_{stg}$   | - 55 to + 150 | $^{\circ}\text{C}$ |

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

| Parameter                                                                                                                | Symbol   | Max.       | Unit          |
|--------------------------------------------------------------------------------------------------------------------------|----------|------------|---------------|
| Forward Voltage<br>at $I_F = 100\text{ mA}$                                                                              | $V_F$    | 1.2        | V             |
| Reverse Current<br>at $V_R = 30\text{ V}$<br>at $V_R = 80\text{ V}$                                                      | $I_R$    | 0.1<br>0.5 | $\mu\text{A}$ |
| Total Capacitance<br>at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$                                                          | $C_T$    | 3          | pF            |
| Reverse Recovery Time<br>at $I_F = 10\text{ mA}$ to $I_R = 1\text{ mA}$ , $V_R = 6\text{ V}$ , $R_L = 100\text{ }\Omega$ | $t_{rr}$ | 4          | ns            |

