

## Silicon Epitaxial Planar Switching Diode

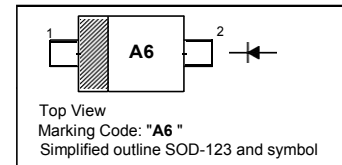
### Features

- Fast switching diode

### MARKING:A6

#### PINNING

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



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

| Parameter                                 | Symbol    | Value                         | Unit             |
|---|-----------|-------------------------------|------------------|
| Reverse Voltage                           | $V_R$     | 75                            | V                |
| Peak Reverse Voltage                      | $V_{RM}$  | 100                           | V                |
| Forward Current (Continuous)              | $I_F$     | 250                           | mA               |
| Non-repetitive Peak Forward Surge Current | $I_{FSM}$ | 0.5<br>1<br>2                 | A                |
|   |           | at $t = 1\text{ s}$           |                  |
|   |           | at $t = 1\text{ ms}$          |                  |
|   |           | at $t = 1\text{ }\mu\text{s}$ |                  |
| Power Dissipation                         | $P_{tot}$ | 200                           | mW               |
| Junction Temperature                      | $T_j$     | 150                           | $^\circ\text{C}$ |
| Storage Temperature Range                 | $T_{stg}$ | - 65 to + 150                 | $^\circ\text{C}$ |

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

| Parameter   | Symbol    | Max.  | Unit          |
|---|-----------|-------|---------------|
| Forward Voltage   | $V_F$     | 0.715 | V             |
| at $I_F = 1\text{ mA}$  |           | 0.855 |               |
| at $I_F = 10\text{ mA}$   |           | 1     |               |
| at $I_F = 50\text{ mA}$   |           | 1.25  |               |
| Reverse Leakage Current   | $I_R$     | 1     | $\mu\text{A}$ |
| at $V_R = 75\text{ V}$  |           | 30    |               |
| at $V_R = 25\text{ V}$ , $I_J = 150\text{ }^\circ\text{C}$  |           | 50    |               |
| Diode Capacitance   | $C_{tot}$ | 2     | pF            |
| at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$  |           |       |               |
| Reverse Recovery Time   | $t_{rr}$  | 6     | ns            |
| at $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}$ , $I_R = 1\text{ mA}$ , $R_L = 100\text{ }\Omega$ |           |       |               |

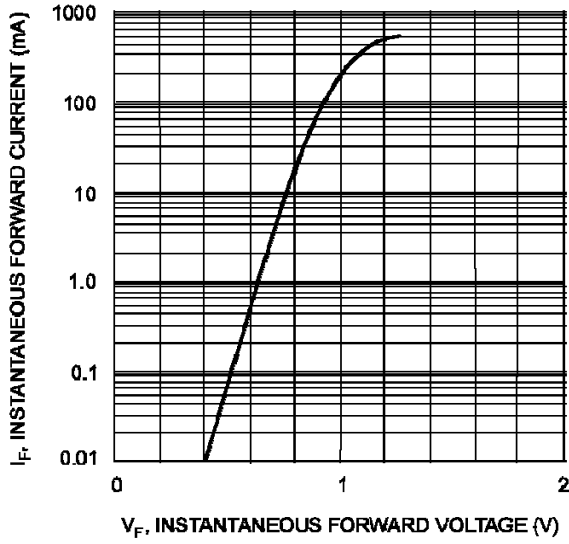


Fig. 1 Forward Characteristics

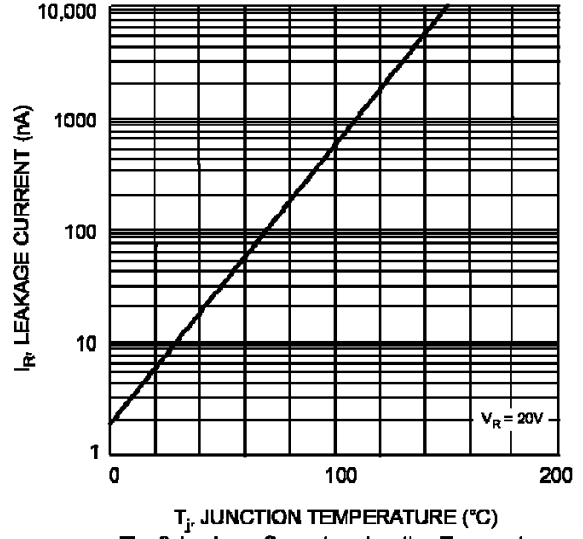


Fig. 2 Leakage Current vs Junction Temperature