## Silicon Epitaxial Planar Switching Diode

Fast Switching Diode



Absolute Maximum Ratings ( $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$ )

| Parameter | Symbol | Value | Unit |
| :--- | :---: | :---: | :---: |
| Peak Reverse Voltage | $\mathrm{V}_{\mathrm{RM}}$ | 100 | V |
| Reverse Voltage | $\mathrm{V}_{\mathrm{R}}$ | 80 | V |
| Average Rectified Forward Current | $\mathrm{I}_{\mathrm{F}(\mathrm{AV})}$ | 150 | mA |
| Forward Continuous Current | $\mathrm{I}_{\mathrm{FM}}$ | 300 | mA |
| Non-Repetitive Peak Forward Surge Current (at $\mathrm{t}=1 \mu \mathrm{~s})$ | $\mathrm{I}_{\mathrm{FSM}}$ | 0.5 | A |
| Power Dissipation | $\mathrm{P}_{\mathrm{d}}$ | 200 | mW |
| Junction Temperature | $\mathrm{T}_{\mathrm{j}}$ | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\text {stg }}$ | $-65 \mathrm{to}+150$ | ${ }^{\circ} \mathrm{C}$ |

Characteristics at $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Min. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: |
| Forward Voltage <br> at $I_{F}=5 \mathrm{~mA}$ <br> at $I_{F}=10 \mathrm{~mA}$ <br> at $I_{F}=100 \mathrm{~mA}$ <br> at $I_{F}=150 \mathrm{~mA}$ | $V_{F}$ | $\begin{gathered} 0.62 \\ - \\ - \end{gathered}$ | $\begin{gathered} 0.72 \\ 0.855 \\ 1 \\ 1.25 \end{gathered}$ | V |
| Reverse Leakage Current $\begin{aligned} & \text { at } V_{R}=80 \mathrm{~V} \\ & \text { at } \mathrm{V}_{\mathrm{R}}=20 \mathrm{~V} \\ & \text { at } \mathrm{V}_{\mathrm{R}}=75 \mathrm{~V}, \mathrm{~T}_{J}=150^{\circ} \mathrm{C} \\ & \text { at } \mathrm{V}_{\mathrm{R}}=25 \mathrm{~V}, \mathrm{~T}_{\mathrm{J}}=150^{\circ} \mathrm{C} \end{aligned}$ | $\mathrm{I}_{\mathrm{R}}$ |  | $\begin{gathered} 100 \\ 25 \\ 50 \\ 30 \end{gathered}$ | nA nA $\mu \mathrm{A}$ $\mu \mathrm{A}$ |
| Reverse Breakdown Voltage at $I_{R}=100 \mu \mathrm{~A}$ | $\mathrm{V}_{(\mathrm{BR}) \mathrm{R}}$ | 80 | - | V |
| Total Capacitance at $\mathrm{V}_{\mathrm{R}}=0.5 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ | $\mathrm{C}_{\text {tot }}$ | - | 4 | pF |
| Reverse Recovery Time at $\mathrm{I}_{\mathrm{F}}=\mathrm{I}_{\mathrm{R}}=10 \mathrm{~mA}, \mathrm{I}_{\mathrm{rr}}=0.1 \mathrm{XI} \mathrm{I}_{\mathrm{R}}, \mathrm{R}_{\mathrm{L}}=100 \Omega$ | $t_{\text {rr }}$ | - | 4 | ns |



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads SOD-323

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Diodes - General Purpose, Power, Switching category:
Click to view products by Hong Kong Chuangji manufacturer:
Other Similar products are found below :
$\underline{053684 \mathrm{~A}} 057245 \mathrm{E} \underline{10 \mathrm{~A} 1} \underline{10 \mathrm{~A} 10} 10 \mathrm{~A} 10 \underline{10 \mathrm{~A} 10-\mathrm{F}} 10 \mathrm{~A} 10 \mathrm{G} \underline{10 \mathrm{~A} 6} 10 \mathrm{~A} 6 \underline{15 \mathrm{~A} 10} 1641 \underline{1 \mathrm{~A} 1} \underline{1 \mathrm{~A} 2} \underline{1 \mathrm{~A} 3} \underline{1 \mathrm{~A} 4} \underline{1 \mathrm{~A} 5} \underline{1 \mathrm{~A} 5} \underline{1 \mathrm{~A} 6} \underline{1 \mathrm{~A} 6} \underline{1 \mathrm{~A} 7} \underline{1 \mathrm{~A} 7}$
1 A 71 A 71 A 71 A 7 R 1N3004WS 1N3064TR 1 N 3070 1N3070TR 1N3493R-SGS 1N3595 1N3595TR 1 N 3600 TR 1 N 36111 N 4001
1N4001 1N4001 1N4001 1N4001 1N4001 1N4001A 1N4001F 1N4001G 1N4001G 1N4001W 1N4001W 1N4001WS 1N4002 1N4002
1N4002

