## Silicon Epitaxial Planar Low Leakage Diode

For low leakage current applications

## Feature

- Very low leakage current
- Medium speed switching times

PINNING

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



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

| Parameter | Symbol | Value | Unit |
| :---: | :---: | :---: | :---: |
| Peak Repetitive Reverse Voltage | $V_{\text {RRM }}$ | 130 | V |
| Continuous Forward Current | $\mathrm{I}_{\text {FM }}$ | 215 | mA |
| Repetitive Peak Forward Current | $\mathrm{I}_{\text {FRM }}$ | 500 | mA |
| Non-Repetitive Peak Forward Surge Current $\begin{array}{ll}\text { at } t=1 \mu \mathrm{~s} \\ & \text { at } t=1 \mathrm{~ms} \\ \text { at } t=1 \mathrm{~s}\end{array}$ | $\mathrm{I}_{\text {FSM }}$ | $\begin{gathered} \hline 4 \\ 1 \\ 0.5 \end{gathered}$ | A |
| Power Dissipation | $\mathrm{P}_{\mathrm{D}}$ | 250 | mW |
| Thermal Resistance Junction to Ambient Air | $\mathrm{R}_{\text {өJA }}$ | 500 | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Operating and Storage Temperature Range | $\mathrm{T}_{\mathrm{j}}, \mathrm{T}_{\text {stg }}$ | -65 to +150 | ${ }^{\circ} \mathrm{C}$ |

Electrical Characteristics ( $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$ )

| Parameter | Symbol | Min. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: |
| Reverse Breakdown Voltage at $I_{R}=100 \mu \mathrm{~A}$ | $\mathrm{V}_{(\mathrm{BR}) \mathrm{R}}$ | 130 | - | V |
| $\begin{aligned} & \text { Forward Voltage } \\ & \text { at } I_{F}=1 \mathrm{~mA} \\ & \text { at } I_{F}=10 \mathrm{~mA} \\ & \text { at } I_{F}=50 \mathrm{~mA} \\ & \text { at } I_{F}=150 \mathrm{~mA} \end{aligned}$ | $V_{F}$ | - | $\begin{gathered} 0.9 \\ 1 \\ 1.1 \\ 1.25 \end{gathered}$ | V |
| $\begin{aligned} & \text { Reverse Current } \\ & \text { at } V_{R}=75 \mathrm{~V} \\ & \text { at } V_{R}=75 \mathrm{~V}, \mathrm{~T}_{j}=125^{\circ} \mathrm{C} \end{aligned}$ | $I_{\text {R }}$ | - | $\begin{gathered} 5 \\ 80 \end{gathered}$ | nA |
| Total Capacitance at $\mathrm{V}_{\mathrm{R}}=0, \mathrm{f}=1 \mathrm{MHz}$ | $\mathrm{C}_{\text {T }}$ | - | 5 | pF |
| Reverse Recovery Time at $I_{F}=I_{R}=10 \mathrm{~mA}, \mathrm{I}_{\mathrm{rr}}=0.1 \mathrm{X} \mathrm{I}_{\mathrm{R}}, \mathrm{R}_{\mathrm{L}}=100 \Omega$ | $\mathrm{t}_{\mathrm{rr}}$ | - | 3 | $\mu \mathrm{s}$ |



## PACKAGE OUTLINE



| Symbol | Dimension in Millimeters |  |
| :---: | :---: | :---: |
|  | Min | Max |
| A | 0.95 | 1.15 |
| A1 | 0.01 | 0.100 |
| B | 1.55 | 1.65 |
| bp | 0.50 | 0.70 |
| C | 0.09 | 0.150 |
| E | 2.60 | 2.70 |
| HE | 3.45 | 3.85 |
| Lp | 0.20 | 0.45 |
| $\theta$ | $0^{\circ}$ | $5^{\circ}$ |

