## Features

- For general purpose applications
- Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.
- This diode is also available in the MiniMELF case with type designation LL5711 and LL6263.
- Pb / RoHS Free


## Mechanical Data

- Case: DO-35 Glass Case
- Weight: approx. 0.13 g


| DO-35 |  |  |
| :---: | :---: | :---: |
| Dim | Min | Max |
| A | 25.40 | - |
| B | - | 4.00 |
| C | - | 0.60 |
| D | - | 2.00 |
| All Dimensions in mm |  |  |

## Maximum Ratings and Electrical Characteristics @ $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ unless otherwise specified

| Parameter |  |  | Symbol |  |  |  | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Repetitive Peak Reverse Voltage |  | 1N5711 | $V_{\text {RrM }}$ | 70 |  |  | V |
|  |  | 1N6263 |  |  | 60 |  |  |
| Power Dissipation (Infinite Heatsink) |  |  | $\mathrm{P}_{\mathrm{D}}$ | $400^{(1)}$ |  |  | mW |
| Maximum Single Cycle Surge $10 \mu \mathrm{~s}$ Square Wave |  |  | $\mathrm{I}_{\text {FSM }}$ | 2 |  |  | A |
| Thermal Resistance Junction to Ambient Air |  |  | $\mathrm{R}_{\text {өJA }}$ | $0.3{ }^{(1)}$ |  |  | ${ }^{\circ} \mathrm{C} / \mathrm{mW}$ |
| Junction Temperature |  |  | $\mathrm{T}_{J}$ | $125^{(1)}$ |  |  | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature range |  |  | $\mathrm{T}_{\text {S }}$ | -55 to $+150{ }^{(1)}$ |  |  | ${ }^{\circ} \mathrm{C}$ |
| Parameter | Symbol | Test Condition |  | Min | Typ | Max | Unit |
| $\begin{array}{ll}\text { Reverse Breakdown Voltage } & \begin{array}{l}\text { 1N5711 } \\ \text { 1N6263 }\end{array}\end{array}$ | $\mathrm{V}_{(\mathrm{BR}) \mathrm{R}}$ | $\mathrm{I}_{\mathrm{R}}=10 \mu \mathrm{~A}$ |  | $\begin{aligned} & 70 \\ & 60 \end{aligned}$ | - | - | V |
| Reverse Current | $\mathrm{I}_{\mathrm{R}}$ | $\mathrm{V}_{\mathrm{R}}=50 \mathrm{~V}$ |  | - | - | 200 | nA |
| Forward Voltage Drop | $V_{F}$ | $\begin{aligned} & I_{F}=1 \mathrm{~mA} \\ & I_{F}=15 \mathrm{~mA} \end{aligned}$ |  | - | - | $\begin{array}{r} 0.41 \\ 1.0 \end{array}$ | V |
| $\begin{array}{ll}\text { Diode Capacitance } & \text { 1N5711 } \\ & \text { 1N6263 }\end{array}$ | Cd | $\mathrm{V}_{\mathrm{R}}=0 \mathrm{~V}$, | MHz | - | - | $\begin{aligned} & 2.0 \\ & 2.2 \end{aligned}$ | pF |
| Reverse Recovery Time | Trr | $I_{F}=I_{R}=5 r$ <br> recover to |  | - | - | 1 | ns |

## Note:

(1) Valid provided that leads at a distance of 4 mm from case are kept at ambient temperature..

Typical variation of forward current and forward voltage for primary conduction through the schottky barrier


Typical capacitance curve as a function of reverse voltage

Typical forward conduction curve of combination schottky barrier and PN junction guard ring


Typical variation of reverse current at various temperatures


