



# Schottky Barrier Diode

## Features

- 1. High reliability
- 2. Low reverse current and low forward voltage



## Applications

Low current rectification and high speed switching

## Construction

Silicon epitaxial planar

## Absolute Maximum Ratings

$T_j=25^{\circ}\text{C}$

| Parameter                       | Test Conditions          | Type  | Symbol    | Value    | Unit               |
|---------------------------------|--------------------------|-------|-----------|----------|--------------------|
| Repetitive peak reverse voltage |                          | LL60  | $V_{RRM}$ | 40       | V                  |
|                                 |                          | LL60P | $V_{RRM}$ | 45       | V                  |
| Peak forward surge current      | $t_p \leq 1\text{ s}$    | LL60  | $I_{FSM}$ | 150      | mA                 |
|                                 |                          | LL60P | $I_{FSM}$ | 500      | mA                 |
| Forward continuous current      | $T_a=25^{\circ}\text{C}$ | LL60  | $I_F$     | 30       | mA                 |
|                                 |                          | LL60P | $I_F$     | 50       | mA                 |
| Storage temperature range       |                          |       | $T_{stg}$ | -65~+125 | $^{\circ}\text{C}$ |

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

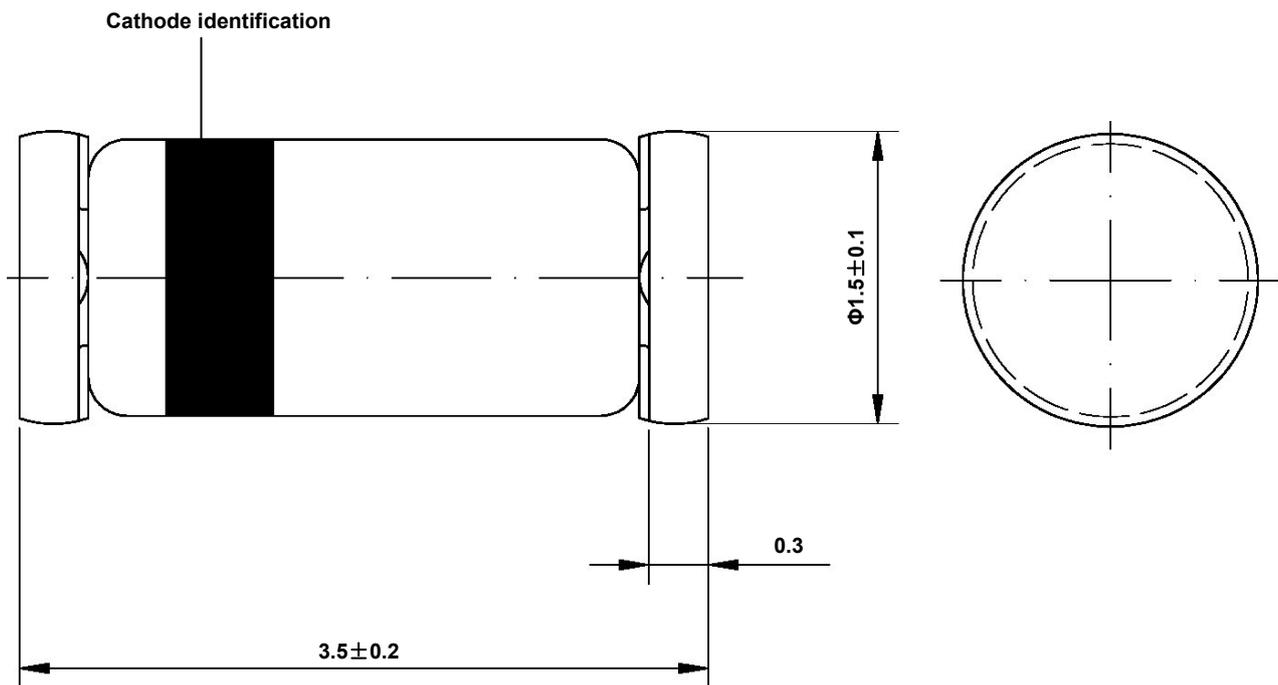


**Electrical Characteristics**

T<sub>j</sub>=25°C

| Parameter             | Test Conditions   | Type  | Symbol          | Min | Typ  | Max | Unit |
|-----------------------|---|-------|-----------------|-----|------|-----|------|
| Forward voltage       | I <sub>F</sub> =1mA   | LL60  | V <sub>F</sub>  |     | 0.32 | 0.5 | V    |
|                       |   | LL60P | V <sub>F</sub>  |     | 0.24 | 0.5 | V    |
|                       | I <sub>F</sub> =30mA  | LL60  | V <sub>F</sub>  |     | 0.65 | 1.0 | V    |
|                       | I <sub>F</sub> =200mA   | LL60P | V <sub>F</sub>  |     | 0.65 | 1.0 | V    |
| Reverse current       | V <sub>R</sub> =15V   | LL60  | I <sub>R</sub>  |     | 0.1  | 0.5 | μA   |
|                       |   | LL60P | I <sub>R</sub>  |     | 0.5  | 1.0 | μA   |
| Junction capacitance  | V <sub>R</sub> =1V, f=1MHz  | LL60  | C <sub>J</sub>  |     | 2.0  |     | pF   |
|                       | V <sub>R</sub> =10V, f=1MHz   | LL60P | C <sub>J</sub>  |     | 6.0  |     | pF   |
| Reverse recovery time | I <sub>F</sub> =I <sub>R</sub> =1mA I <sub>tr</sub> =1mA R <sub>C</sub> =100Ω |       | t <sub>rr</sub> |     |      | 1.0 | ns   |

**Dimensions in mm**



Glass Case  
 Mini Melf / SOD-80  
 JEDEC DO-213 AA

**Excel Semiconductor**