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# FJH1100 Ultra Low Leakage Diode

## **General Description**

An Ultra low leakage diode in the DO-35 package. The forward voltage is typically greater than 0.5 volts at 1.0 micro-ampere. This product is light sensitive, any damage to the body coating will affect the reverse leakage when exposed to light.



## Absolute Maximum Ratings \* T<sub>a</sub>

| s * | $T_a = 25^{\circ}C$ unless otherwise noted |  |
|-----|--|--|
|     |  |  |

| Symbol           | Parameter                                       | Value       | Units |
|------------------|---|-------------|-------|
| W <sub>iv</sub>  | Working Inverse Voltage                         | 15          | V     |
| ۱ <sub>F</sub>   | DC Forward Current (I <sub>F</sub> )            | 150         | mA    |
| PD               | Total Power Dissipation at $T_A = 25^{\circ}C$  | 250         | mW    |
|                  | Linear Derating Factor from $T_A = 25^{\circ}C$ | 1.67        | mW/°C |
| $R_{\thetaJA}$   | Thermal Resistance Junction-to-Ambient          | 300         | °C/W  |
| T <sub>STG</sub> | Storage Temperature                             | -55 to +200 | °C    |
| Τ <sub>J</sub>   | Operating Junction Temperature                  | 175         | °C    |

\* These ratings are limiting values above which the serviceability of any semiconductor device may by impaired.

## Electrical Characteristics T<sub>a</sub> = 25°C unless otherwise noted

| Symbol         | Parameter         | Test Conditions   | Min | Тур.   | Max.      | Units                           |
|----------------|-------------------|---|-----|--|-----------|---------------------------------|
| B <sub>V</sub> | Breakdown Voltage | I <sub>R</sub> = 5.0μA  | 30  |  |           | V                               |
| I <sub>R</sub> | Reverse Leakage   | V <sub>R</sub> = 5.0V<br>V <sub>R</sub> = 15V   |     |  | 3.0<br>10 | рА<br>pA                        |
| V <sub>F</sub> | Forward Voltage   | $I_{F} = 1.0\mu A$ $I_{F} = 10\mu A$ $I_{F} = 100\mu A$ $I_{F} = 1.0mA$ $I_{F} = 10mA$ $I_{F} = 50mA$ $I_{F} = 100mA$ |     | 530<br>605<br>685<br>780<br>895<br>995<br>1.07 | 1050      | mV<br>mV<br>mV<br>mV<br>mV<br>V |
| CT             | Diode Capacitance | $V_R = 0V$ , f = 1.0MHz   |     |  | 2.0       | pF                              |

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|--------------------------|---------------------------|---|
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