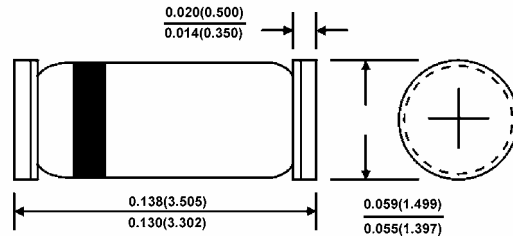




LL4448 /LL4148/LL914B

500mW Hermetically Sealed Glass Fast Switching Diodes

MINI MELF



Dimensions in inches and (millimeters)

Features

- ✧ Fast switching device ($T_{RR} < 4.0\text{nS}$)
- ✧ LL-34(Mini-MELF) package
- ✧ Surface device type mounting
- ✧ Hermetically sealed glass
- ✧ Compression bonded construction
- ✧ All external surfaces are corrosion resistant and terminals are readily solderable
- ✧ RoHS compliant
- ✧ Matte Tin (Sn) lead finish
- ✧ Blue color band indicates negative polarity

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

| Type Number | Symbol | Value | Units |
|-------------------------------------|--------------|--------------|-------|
| Power Dissipation | P_d | 500 | mW |
| Working Inverse Voltage | W_{IV} | 75 | V |
| Non-repetitive Peak Forward Current | I_{FM} | 450 | mA |
| Average Rectified Current | I_o | 150 | mA |
| Peak Forward Surge Current | I_{FSURGE} | 2 | A |
| Operating Junction Temperature | T_J | 175 | °C |
| Storage Temperature Range | T_{STG} | -65 to + 200 | °C |

Electrical Characteristics

| Type Number | Symbol | Min | Max | Units |
|---|----------|-----------|--------------------|----------|
| Breakdown Voltage IR=100uA IR=5uA | B_V | 100 75 | | V |
| Forward Voltage LL4448, LL914B IF=5.0mA LL4148 IF= 10mA LL4448, LL914B IF =100mA | V_F | 0.62 | 0.72 1.0 1.0 | V |
| Reverse Leakage Current VR=20V VR=75V | I_R | | 25 5 | nA uA |
| Junction Capacitance VR=0, f=1.0MHz | C_j | - | 4.0 | pF |
| Reverse Recovery Time (Note 1) | t_{rr} | - | 4.0 | nS |

Notes: 1. Reverse Recovery Test Conditions: $I_F=10\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$, $I_{RR}=1\text{mA}$

RATINGS AND CHARACTERISTIC CURVES (LL4448/LL4148/LL914B)

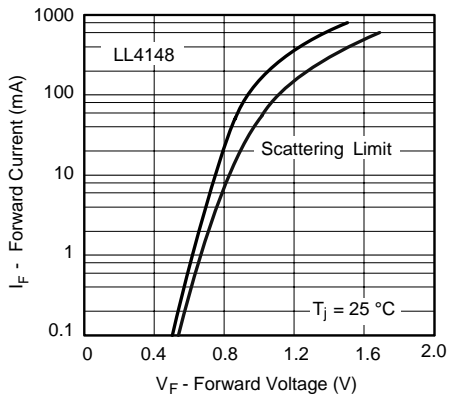


Figure 1. Forward Current vs. Forward Voltage

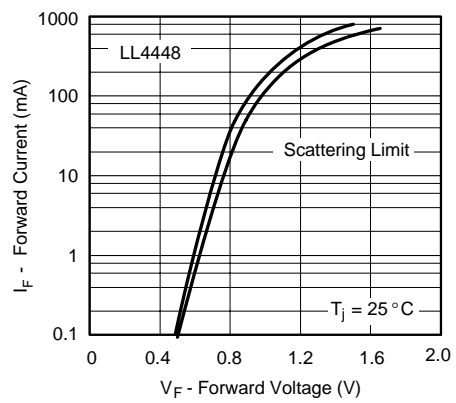


Figure 2. Forward Current vs. Forward Voltage

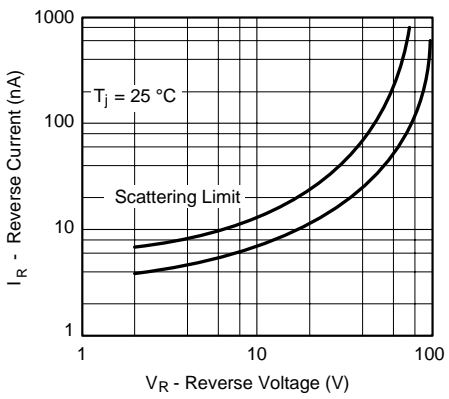


Figure 3. Reverse Current vs. Reverse Voltage

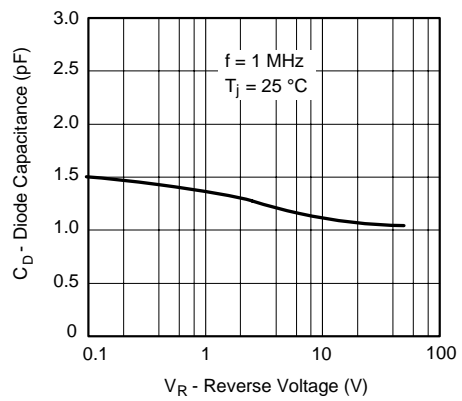


Figure 4. Diode Capacitance vs. Reverse Voltage