

MINI MELF Glass-Encapsulate Diodes

Small Signal Fast Switching Diodes

Features

- V_R 50-200V
- I_F 250mA

Applications

- Extreme fast switches

MINI MELF(SOD-80/ LL- 34)



Limiting Values (Absolute Maximum Rating)

| Item | Symbol | Unit | Conditions | BAV | | | |
|--------------------------------------|-----------|------------------|--|------------|-----|-----|-----|
| | | | | 100 | 101 | 102 | 103 |
| Repetitive Peak Reverse Voltage | V_{RRM} | V | | 50 | 100 | 150 | 200 |
| Repetitive Peak Reverse Voltage | V_R | V | | 60 | 120 | 200 | 250 |
| Forward current | I_F | mA | 60Hz Half-sine wave, Resistance load, $T_a=25^\circ\text{C}$ | 250 | | | |
| Surge(Non-repetitive)Forward Current | I_{FSM} | A | 60Hz Half-sine wave,1 cycle, $T_a=25^\circ\text{C}$ | 1 | | | |
| Junction Temperature | T_J | $^\circ\text{C}$ | | -55~+175 | | | |
| Storage Temperature | T_{STG} | $^\circ\text{C}$ | | -55 ~ +175 | | | |
| Power Dissipation | P_{tot} | mW | | 400 | | | |

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

| Item | Symbol | Unit | Test Condition | Max |
|-----------------------|-----------|---------------|---|--------------|
| Peak Forward Voltage | V_{FM} | V | $I_{FM}=1.00\text{ mA}$ $I_{FM}=2.00\text{ mA}$ | 1.00 1.25 |
| Peak Reverse Current | I_{RRM} | μA | $V_{RM}=V_R$ $T_a=25^\circ\text{C}$ | 0.1 |
| Reverse recovery time | t_{rr} | ns | $I_F=30\text{mA}$ to $I_R=30\text{mA}$, $I_{rr}=3\text{mA}$, $R_L=100\Omega$ | 50 |
| Diode capacitance | C_d | pF | $V_R=0$, $f=1\text{MHz}$ | 5 |

Figure 1. Reverse Current vs. Junction Temperature

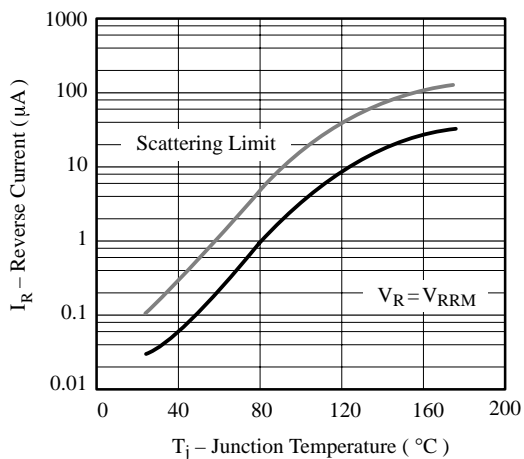


Figure 2. Forward Current vs. Forward Voltage

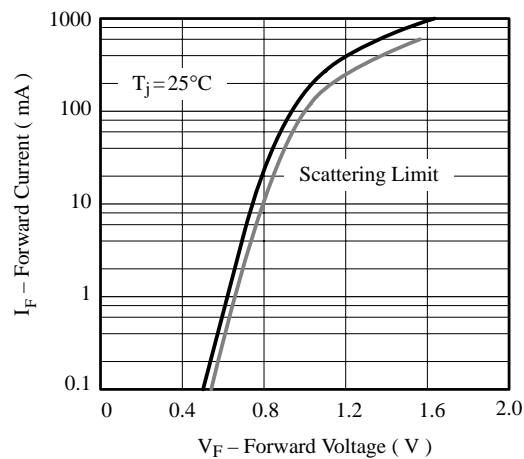
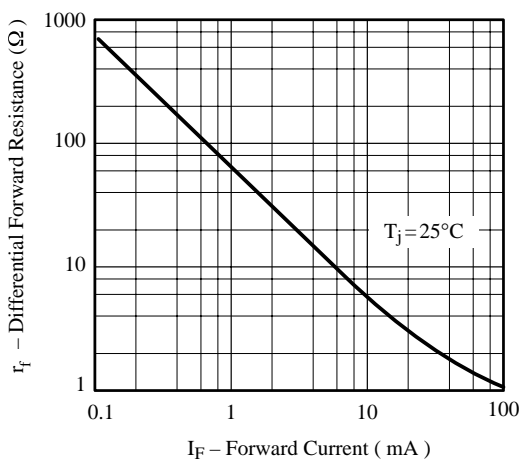
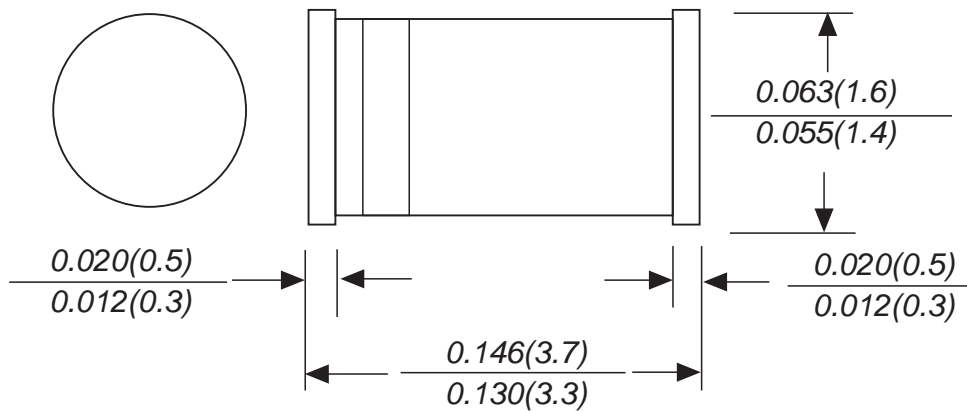


Figure 3. Differential Forward Resistance vs. Forward Current

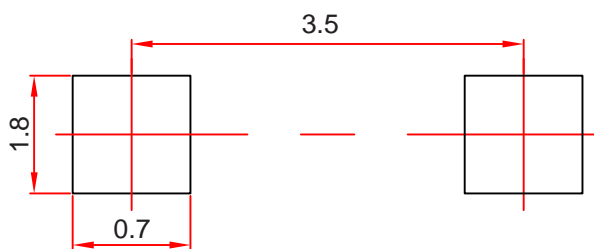


MINI MELF Package Outline Dimensions



Dimensions in millimeters

MINI MELF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

JSHD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSHD does not assume any liability arising out of the application or use of any product described herein.

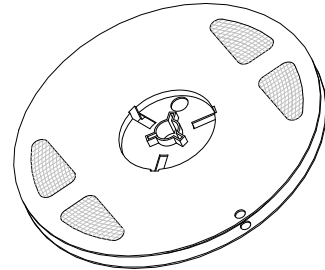
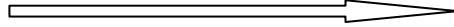
Packaging Specifications for Surface Mounted Glass Diodes

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)

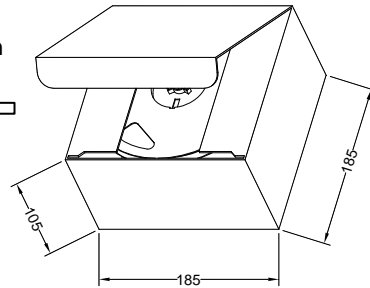
LS-31 (MicroMELF)
LS-34 (QuadroMELF)
LL-34 (MiniMELF)
DO-213AA(MiniMELF)



2,500 pcs per reel



20,000 pcs per box
8 reels per box



100,000 pcs per carton
5 boxes per carton

