

MCL-SS355

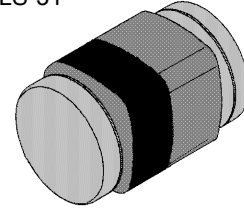
Silicon Epitaxial Planar Switching Diode

High-speed switching applications

Features

- Fits onto SOD-323 / SOT-23 footprints
- High reliability with high surge current handling capability.

LS-31



Glass Case MicroMELF

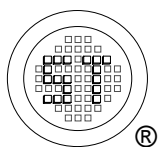
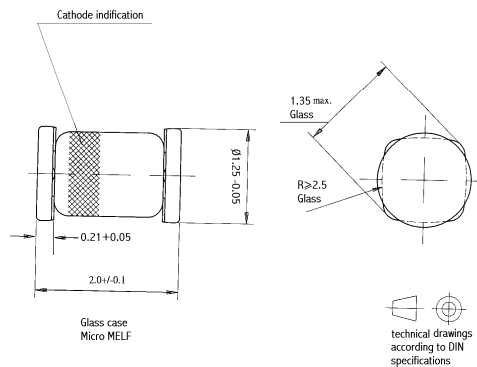
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|-----------------------------------|-------------|---------------|------------------|
| Peak Reverse Voltage | V_{RM} | 90 | V |
| Reverse Voltage | V_R | 80 | V |
| Average Rectified Forward Current | $I_{F(AV)}$ | 100 | mA |
| Peak Forward Current | I_{FM} | 225 | mA |
| Surge Forward Current (1 s) | I_{FSM} | 500 | mA |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55 to + 150 | $^\circ\text{C}$ |

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

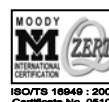
| Parameter | Symbol | Max. | Unit |
|---|----------|------|---------------|
| Forward Voltage at $I_F = 100\text{ mA}$ | V_F | 1.2 | V |
| Reverse Current at $V_R = 80\text{ V}$ | I_R | 0.1 | μA |
| Diode Capacitance at $V_R = 0.5\text{ V}$, $f = 1\text{ MHz}$ | C_d | 3 | pF |
| Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\text{ }\Omega$ | t_{rr} | 4 | ns |

Dimensions in mm



SEMTECH ELECTRONICS LTD.

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Dated : 15/06/2009

ELECTRICAL CHARACTERISTIC CURVES (Ta=25°C)

Fig. 1- FORWARD CHARACTERISTICS

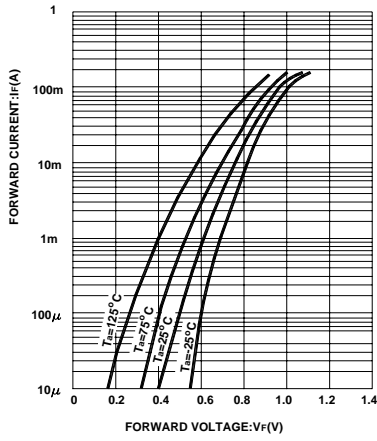


Fig. 2- REVERSE CHARACTERISTICS

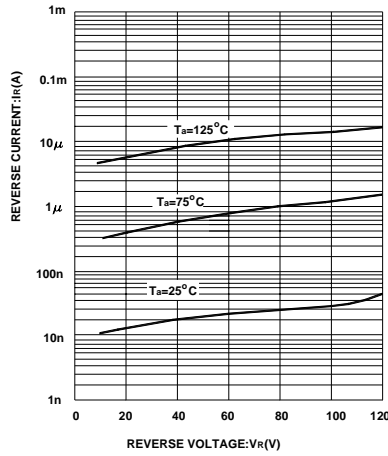


Fig. 3- CAPACITANCE BETWEEN TERMINALS CHARACTERISTICS

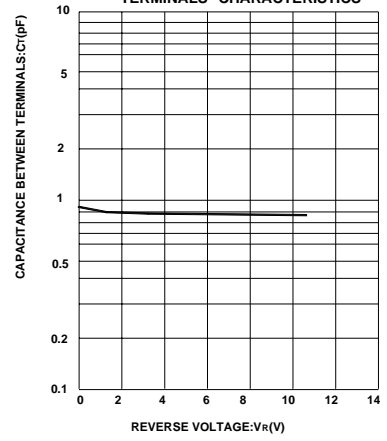


Fig. 4- REVERSE RECOVERY TIME CHARACTERISTICS

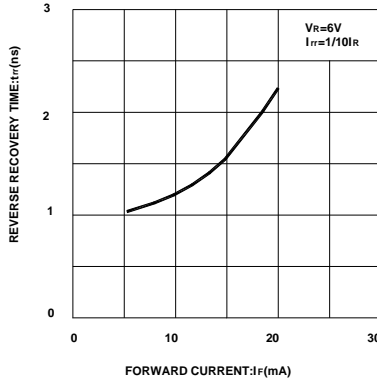


Fig. 5- SURGE CURRENT CHARACTERISTICS

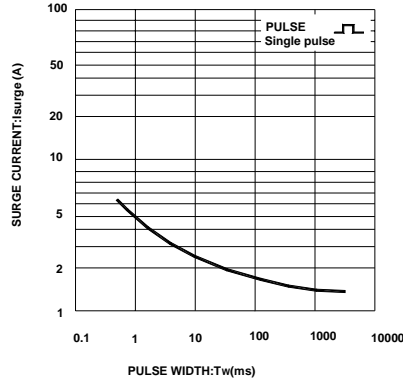
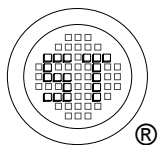
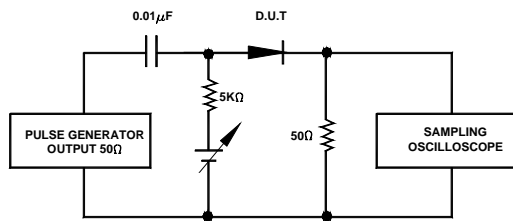


Fig. 6- REVERSE RECOVERY TIME(trr) MEASUREMENT CIRCUIT



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