

Glass case MiniMELF  
Dimensions in mm

LL-34

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

| Parameter                                 | Symbol    | Value                          | Unit             |
|---|-----------|--------------------------------|------------------|
| Repetitive Peak Reverse Voltage           | $V_{RRM}$ | 120                            | V                |
|   |           | 200                            |                  |
|   |           | 250                            |                  |
| Reverse Voltage                           | $V_R$     | 100                            | V                |
|   |           | 150                            |                  |
|   |           | 200                            |                  |
| Continuous Forward Current                | $I_F$     | 250                            | mA               |
| Repetitive Peak Forward Current           | $I_{FRM}$ | 625                            | mA               |
| Non-repetitive Peak Forward Surge Current | $I_{FSM}$ | at $t = 1\text{ s}$<br>1       | A                |
|   |           | at $t = 100\ \mu\text{s}$<br>3 |                  |
|   |           | at $t = 1\ \mu\text{s}$<br>9   |                  |
| Total Power Dissipation                   | $P_{tot}$ | 400                            | mW               |
| Junction Temperature                      | $T_j$     | 175                            | $^\circ\text{C}$ |
| Storage Temperature Range                 | $T_{stg}$ | - 65 to + 175                  | $^\circ\text{C}$ |

### Thermal Characteristics

| Parameter  | Symbol          | Max. | Unit               |
|--|-----------------|------|--------------------|
| Thermal Resistance Junction to Ambient <sup>1)</sup> | $R_{\theta JA}$ | 375  | $^\circ\text{C/W}$ |

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.

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

| Parameter  | Symbol   | Max.  | Unit  |
|--|--|---|---|
| Forward Voltage<br>at $I_F = 100\text{ mA}$<br>at $I_F = 200\text{ mA}$  | $V_F$  | 1<br>1.25                                       | V   |
| Reverse Current<br>at $V_R = 100\text{ V}$<br>at $V_R = 150\text{ V}$<br>at $V_R = 200\text{ V}$<br>at $V_R = 100\text{ V}, T_j = 150^\circ\text{C}$<br>at $V_R = 150\text{ V}, T_j = 150^\circ\text{C}$<br>at $V_R = 200\text{ V}, T_j = 150^\circ\text{C}$ | BAV101<br>BAV102<br>BAV103<br>BAV101<br>BAV102<br>BAV103 | $I_R$<br>100<br>100<br>100<br>100<br>100<br>100 | nA<br>nA<br>nA<br>$\mu\text{A}$<br>$\mu\text{A}$<br>$\mu\text{A}$ |
| Diode Capacitance<br>at $V_R = 0, f = 1\text{ MHz}$  | $C_d$  | 5   | pF  |
| Reverse Recovery Time<br>at $I_F = I_R = 30\text{ mA}, I_{rr} = 3\text{ mA}, R_L = 100\ \Omega$  | $t_{rr}$   | 50  | ns  |

**Electrical Characteristics Curves**

Fig 1. Derating Curve

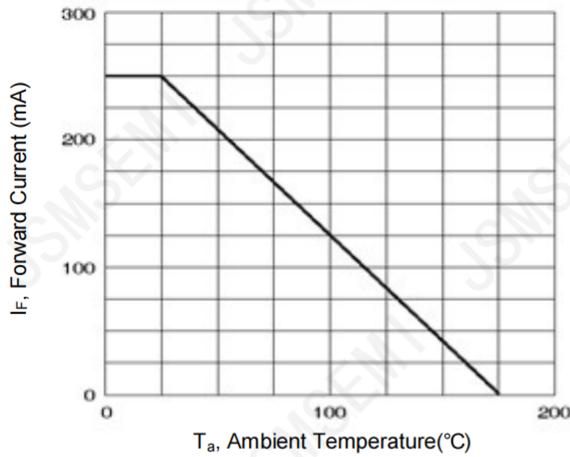


Fig 2. Forward Characteristics

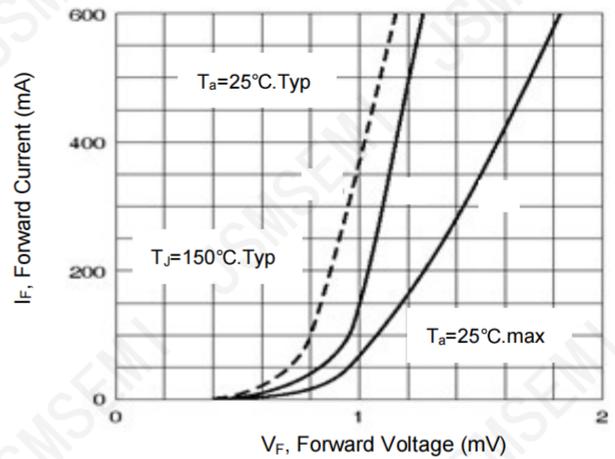


Fig 3.  $C_d$  vs.  $V_R$

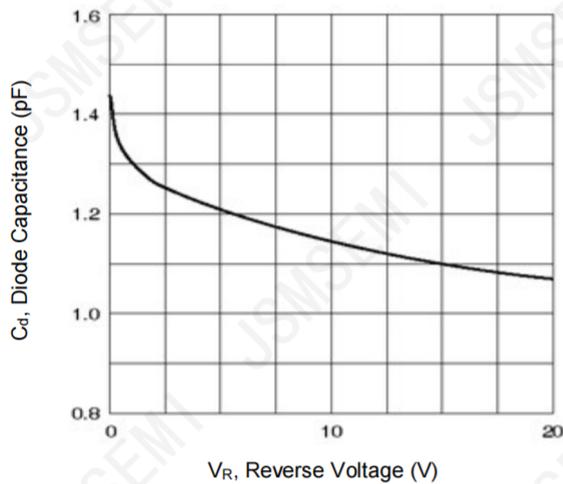


Fig 4.  $I_{FSM}$  vs.  $T_p$

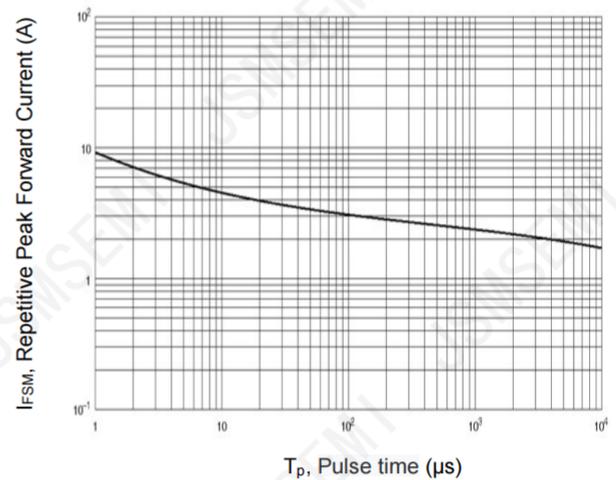
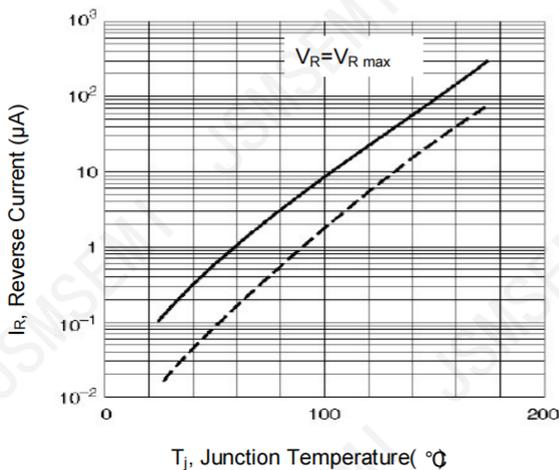


Fig 5. Reverse Characteristics



## Revision History

| Rev. | Change          | Date      |
|------|-----------------|-----------|
| V1.0 | Initial version | 2/23/2024 |
|      |                 |           |

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