



## Surface mount diode

## Standard silicon rectifier diodes

### GL 34A...GL 34M

Forward Current: 0,5 A

Reverse Voltage: 50 to 1000 V

### Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0
- white ring denotes " cathode " and " standard rectifier family "
- colored ring denotes " repetitive peak reverse voltage "

### Mechanical Data

- Plastic case MiniMelf / SOD-80 / DO-213AA
- Weight approx.: 0,04 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 10000, 2500 pieces per reel

- 1) Max. temperature of the terminals  $T_T = 75$  °C
- 2)  $I_F = 0,5$  A,  $T_j = 25$  °C
- 3)  $T_A = 25$  °C
- 4) Mounted on P.C. board with 25 mm<sup>2</sup> copper pads at each terminal

| Type   | Polarity color band | Repetitive peak reverse voltage<br>$V_{RRM}$<br>V | Surge peak reverse voltage<br>$V_{RSM}$<br>V | Maximum forward voltage<br>$T_j = 25$ °C<br>$I_F = 0,5$ A<br>$V_F^{(2)}$<br>V | Maximum reverse recovery time<br>$I_F = 0,5$ A<br>$I_R = 1$ A<br>$I_{RR} = 0,25$ A<br>$t_{rr}$<br>ns |
|--------|---------------------|---|--|---|--|
| GL 34A | gray                | 50  | 50   | 1,2   | 1500   |
| GL 34B | red                 | 100   | 100  | 1,2   | 1500   |
| GL 34D | orange              | 200   | 200  | 1,2   | 1500   |
| GL 34G | yellow              | 400   | 400  | 1,2   | 1500   |
| GL 34J | green               | 600   | 600  | 1,3   | 1500   |
| GL 34K | blue                | 800   | 800  | 1,3   | 1500   |
| GL 34M | violet              | 1000  | 1000   | 1,3   | 1500   |

### Absolute Maximum Ratings $T_c = 25$ °C, unless otherwise specified

| Symbol    | Conditions  | Values         | Units            |
|-----------|---|----------------|------------------|
| $I_{FAV}$ | Max. averaged fwd. current, R-load, $T_T = 75$ °C <sup>1)</sup> | 0,5            | A                |
| $I_{FRM}$ | Repetitive peak forward current $f > \text{Hz}$                 | -              | A                |
| $I_{FSM}$ | Peak fwd. surge current 50 Hz half sinus-wave <sup>3)</sup>     | 8,3            | A                |
| $I^2t$    | Rating for fusing, $t < 10$ ms <sup>3)</sup>                    | 0,5            | A <sup>2</sup> s |
| $R_{thA}$ | Max. thermal resistance junction to ambient <sup>4)</sup>       | 150            | K/W              |
| $R_{thT}$ | Max. thermal resistance junction to terminals                   | 70             | K/W              |
| $T_j$     | Operating junction temperature                                  | - 50 ... + 175 | °C               |
| $T_s$     | Storage temperature   | - 50 ... + 175 | °C               |

### Characteristics $T_c = 25$ °C, unless otherwise specified

| Symbol    | Conditions  | Values | Units |
|-----------|---|--------|-------|
| $I_R$     | Maximum leakage current, $T_j = 25$ °C; $V_R = V_{RRM}$   | <5     | µA    |
|           | $T_j = 125$ °C; $V_R = V_{RRM}$   | <50    | µA    |
| $C_j$     | Typical junction capacitance (at MHz and applied reverse voltage of V)  | -      | pF    |
| $Q_{rr}$  | Reverse recovery charge ( $U_R = V$ ; $I_F = A$ ; $dI_F/dt = A/ms$ )  | -      | µC    |
| $E_{RSM}$ | Non repetitive peak reverse avalanche energy ( $I_R = \text{mA}$ ; $T_j = \text{°C}$ ; inductive load switched off) | -      | mJ    |



