

## Surface mount diode

### Ultrafast silicon rectifier diodes

#### EGL 34A ... EGL 34G

**Forward Current: 0,5 A**

**Reverse Voltage: 50 to 400 V**

#### Features

- Max. solder temperature: 260 °C
- Plastic material has UL classification 94V-0
- green ring denotes " cathode " and " ultrafast switching device "
- 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: 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 |
|---------|---------------------|---------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| EGL 34A | gray                | 50                                                | 50                                           | 1,25                                                                         | 50                                                                                                   |
| EGL 34B | red                 | 100                                               | 100                                          | 1,25                                                                         | 50                                                                                                   |
| EGL 34D | orange              | 200                                               | 200                                          | 1,25                                                                         | 50                                                                                                   |
| EGL 34F | brown               | 300                                               | 300                                          | 1,35                                                                         | 50                                                                                                   |
| EGL 34G | yellow              | 400                                               | 400                                          | 1,35                                                                         | 50                                                                                                   |

#### Absolute Maximum Ratings

$T_c = 25$  °C, unless otherwise specified

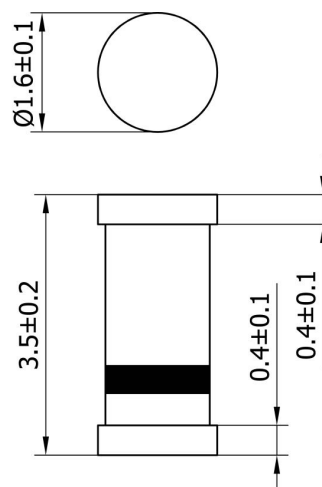
| Symbol    | Conditions                                                      | Values         | Units            |
|-----------|-----------------------------------------------------------------|----------------|------------------|
| $I_{FAV}$ | Max. averaged fwd. current, R-load, $T_T = 75$ °C <sup>1)</sup> | 0,5            | A                |
| $I_{FRM}$ | Repetitive peak forward current $f > \text{Hz}$                 | -              | A                |
| $I_{FSM}$ | Peak fwd. surge current 60 Hz half sinus-wave <sup>3)</sup>     | 10             | 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; $V_R = V_{RRM}$<br>$T_j = 125$ °C; $V_R = V_{RRM}$                             | <5<br><50 | $\mu\text{A}$<br>$\mu\text{A}$ |
| $C_j$     | Typical junction capacitance<br>(at MHz and applied reverse voltage of V)                                              | -         | pF                             |
| $Q_{rr}$  | Reverse recovery charge<br>( $U_R = V$ ; $I_F = A$ ; $dI_F/dt = A/\text{ms}$ )                                         | -         | $\mu\text{C}$                  |
| $E_{RSM}$ | Non repetitive peak reverse avalanche energy<br>( $I_R = \text{mA}$ ; $T_j = \text{°C}$ ; inductive load switched off) | -         | mJ                             |

Dimensions in mm



case: MiniMelf / DO-213AA

