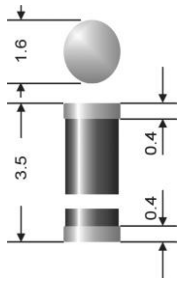
# RGL 34A...RGL 34M




## Surface mount diode

Fast silicon rectifier diodes

**RGL 34A...RGL 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
- red ring denotes " cathode " and " fast switching rectifier family "
- 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, Tj = 25 °C

3) $T_A$ = 25 °C

4) Mounted on P.C. board with 25 mm² copper pads at each terminal

| Type | Polarity color band | Repetitive peak reverse voltage $V_{RRM}$ V | Surge peak reverse voltage $V_{RSM}$ V | Maximum forward voltage $T_j$ = 25 °C $I_F$ = 0,5 A $V_F$ 2) V | Maximum reverse recovery time $I_F$ = 0,5 A $I_R$ = 1 A $I_{RR}$ = 0,25 A $t_{rr}$ ns |
|---|---|---|---|---|---|
| RGL 34A | gray | 50 | 50 | 1,3 | 150 |
| RGL 34B | red | 100 | 100 | 1,3 | 150 |
| RGL 34D | orange | 200 | 200 | 1,3 | 150 |
| RGL 34G | yellow | 400 | 400 | 1,3 | 150 |
| RGL 34J | green | 600 | 600 | 1,3 | 250 |
| RGL 34K | blue | 800 | 800 | 1,3 | 500 |
| RGL 34M | violet | 1000 | 1000 | 1,3 | 500 |

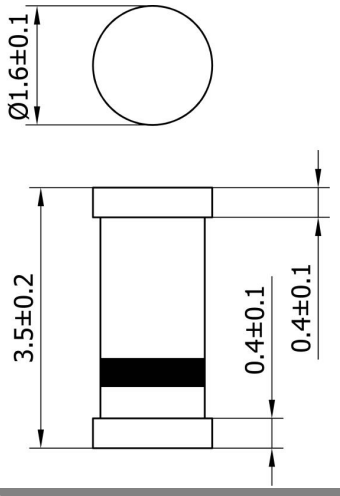
**Absolute Maximum Ratings** $T_c$ = 25 °C, unless otherwise specified

| Symbol | Conditions | Values | Units |
|---|---|---|---|
| $I_{FAV}$ | Max. averaged fwd. current, R-load, $T_T$ = 75 °C 1) | 0,5 | A |
| $I_{FRM}$ | Repetitive peak forward current f > Hz | - | A |
| $I_{FSM}$ | Peak fwd. surge current 60 Hz half sinus-wave 3) | 10 | A |
| $I^2t$ | Rating for fusing, t < 10 ms 3) | 0,5 | $A^2s$ |
| $R_{thA}$ | Max. thermal resistance junction to ambient 4) | 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 ($I_R$ = mA; $T_j$ = °C; inductive load switched off) | - | mJ |

Dimensions in mm




case: MiniMelf / DO-213AA

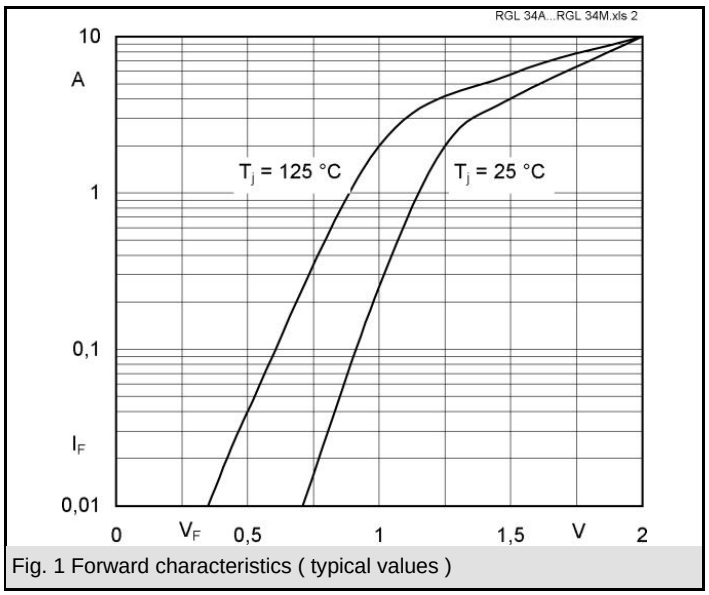



Fig. 1 Forward characteristics ( typical values )

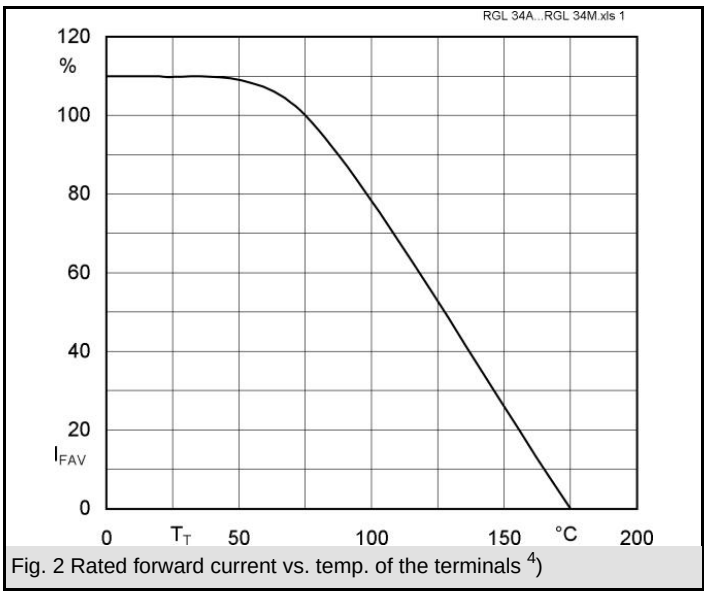



Fig. 2 Rated forward current vs. temp. of the terminals [4])