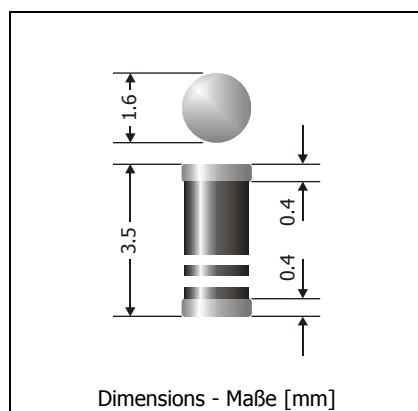


**GL34A ... GL34M**
**Surface Mount Silicon Rectifier Diodes**  
**Silizium-Gleichrichterdioden für die Oberflächenmontage**

Version 2005-08-17



|                                                                                       |             |
|---------------------------------------------------------------------------------------|-------------|
| Nominal current – Nennstrom                                                           | 0.5 A       |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 50...1000 V |
| Plastic case MiniMELF<br>Kunststoffgehäuse MiniMELF                                   | DO-213AA    |
| Weight approx. – Gewicht ca.                                                          | 0.04 g      |
| Plastic material has UL classification 94V-0<br>Gehäusematerial UL94V-0 klassifiziert |             |
| Standard packaging taped and reeled<br>Standard Lieferform gegurtet auf Rolle         |             |



|                |                                                                                |
|----------------|--------------------------------------------------------------------------------|
| Marking:       | 1. white ring denotes "cathode" and "standard rectifier family"                |
|                | 2. colored ring denotes "repetitive peak reverse voltage" (see below)          |
| Kennzeichnung: | 1. weißer Ring kennzeichnet "Kathode" und "Standard-Gleichrichter"             |
|                | 2. farbiger Ring kennzeichnet "Periodische Spitzensperrspannung" (siehe unten) |

**Maximum ratings****Grenzwerte**

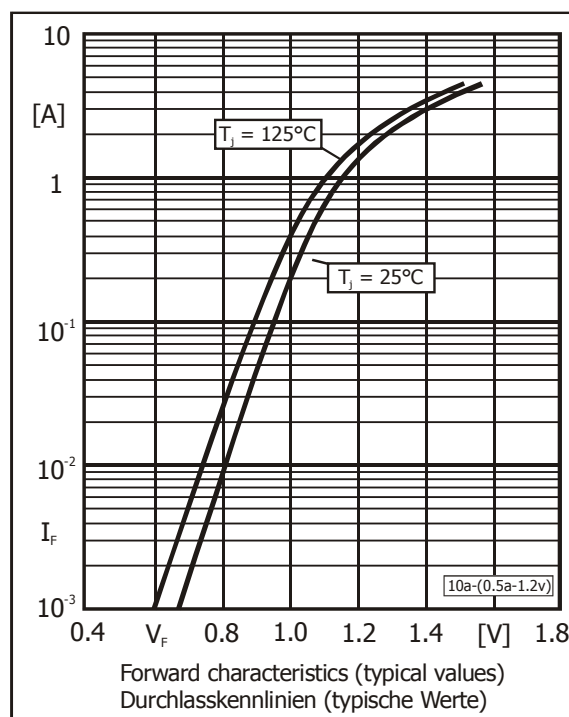
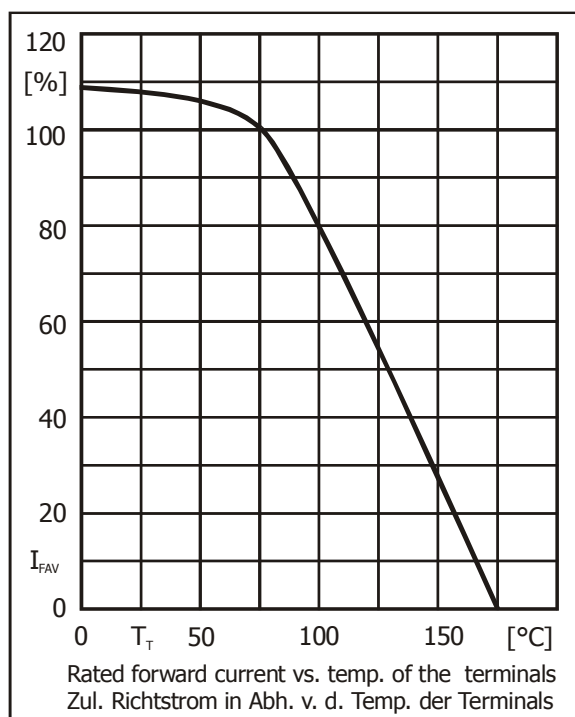
| Type<br>Typ | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] | 2. Cathode ring<br>2. Kathodenring |
|-------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------|
| GL34A       | 50                                                                                   | 50                                                                      | gray / grau                        |
| GL34B       | 100                                                                                  | 100                                                                     | red / rot                          |
| GL34D       | 200                                                                                  | 200                                                                     | orange / orange                    |
| GL34G       | 400                                                                                  | 400                                                                     | yellow / gelb                      |
| GL34J       | 600                                                                                  | 600                                                                     | green / grün                       |
| GL34K       | 800                                                                                  | 800                                                                     | blue / blau                        |
| GL34M       | 1000                                                                                 | 1000                                                                    | violet / violett                   |

|                                                                                                    |                          |                |                              |
|----------------------------------------------------------------------------------------------------|--------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last    | $T_T = 75^\circ\text{C}$ | $I_{FAV}$      | 0.5 A                        |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | $I_{FSM}$      | 8.5/10 A                     |
| Rating for fusing, $t < 10$ ms<br>Grenzlastintegral, $t < 10$ ms                                   | $T_A = 25^\circ\text{C}$ | $i^2t$         | 0.5 A <sup>2</sup> s         |
| Junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur         |                          | $T_j$<br>$T_s$ | -50...+175°C<br>-50...+175°C |

# Characteristics

# Kennwerte

|                                                                                             |                                                                                  |                                    |                        |                |                                         |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------|------------------------|----------------|-----------------------------------------|
| Forward voltage<br>Durchlass-Spannung                                                       | $T_j = 25^\circ\text{C}$                                                         | $I_F = 0.5\text{ A}$               | GL34A...G<br>GL34J...M | $V_F$<br>$V_F$ | < 1.2 V<br>< 1.3 V                      |
| Leakage current<br>Sperrstrom                                                               | $T_j = 25^\circ\text{C}$<br>$T_j = 125^\circ\text{C}$                            | $V_R = V_{RRM}$<br>$V_R = V_{RRM}$ |                        | $I_R$<br>$I_R$ | < 5 $\mu\text{A}$<br>< 50 $\mu\text{A}$ |
| Typical reverse recovery time<br>Typische Sperrverzugszeit                                  | $I_F = 0.5\text{ A}$ through/über<br>$I_R = 1\text{ A}$ to $I_R = 0.25\text{ A}$ |                                    |                        | $t_{rr}$       | 1.5 $\mu\text{s}$                       |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |                                                                                  |                                    |                        | $R_{thA}$      | < 150 K/W <sup>1)</sup>                 |
| Thermal resistance junction to terminal<br>Wärmewiderstand Sperrschicht – Anschluss         |                                                                                  |                                    |                        | $R_{thT}$      | < 70 K/W                                |



1 Mounted on P.C. board with 25 mm<sup>2</sup> copper pads at each terminal  
Montage auf Leiterplatte mit 25 mm<sup>2</sup> Kupferbelag (Löt-pad) an jedem Anschluss