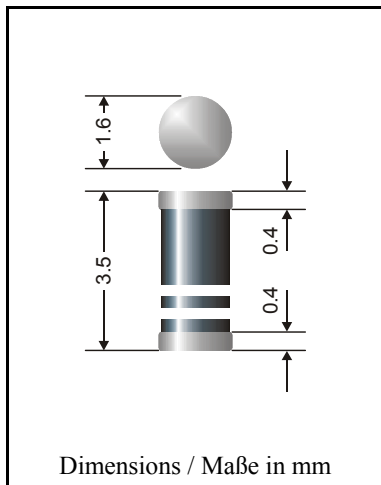


**Surface Mount Si-Rectifiers**

**Si-Gleichrichter für die Oberflächenmontage**



|                                                                                       |                               |
|---------------------------------------------------------------------------------------|-------------------------------|
| Nominal current – Nennstrom                                                           | 0.5 A                         |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 50...1000 V                   |
| Plastic case MiniMELF<br>Kunststoffgehäuse MiniMELF                                   | SOD-80<br>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         | see page 18<br>siehe Seite 18 |

- 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-Gleichrichterfamilie”
  2. farbiger Ring kennzeichnet “Period. Spitzensperrspannung” (siehe unten)

**Maximum ratings**

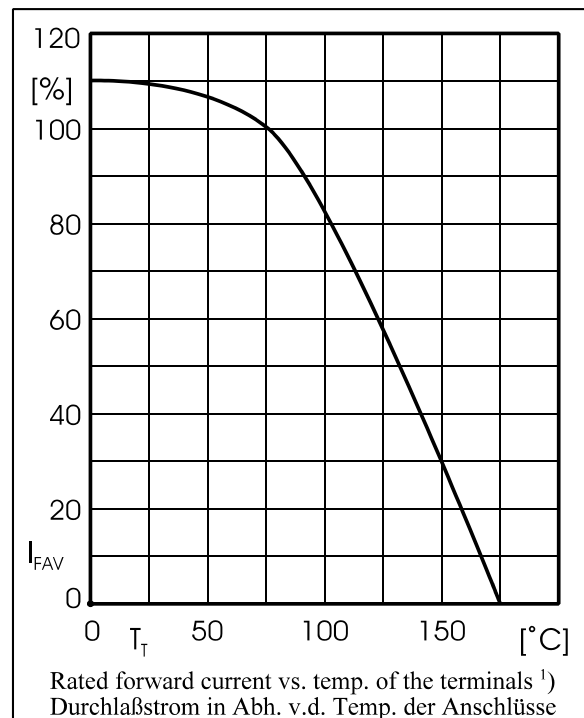
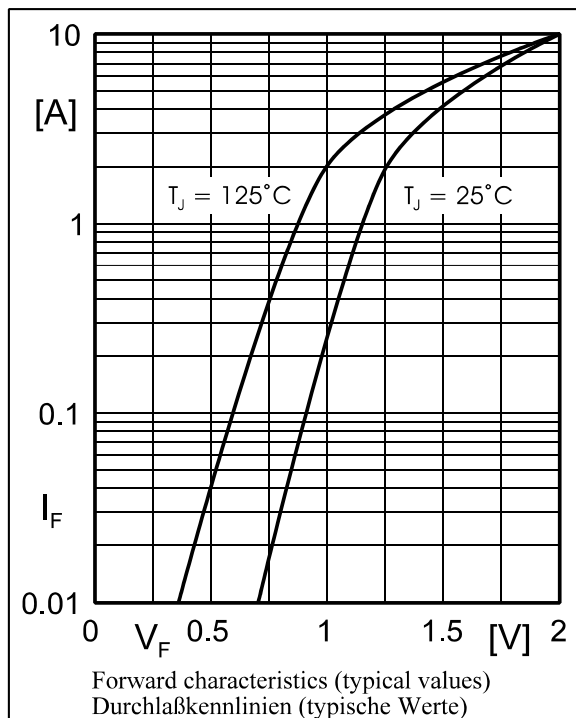
**Grenzwerte**

| Type<br>Typ | Repetitive peak reverse voltage<br>Period. Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] | 2. Cathode ring<br>2. Kathodenring |
|-------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------|
| GL 34A      | 50                                                                               | 50                                                                      | gray / grau                        |
| GL 34B      | 100                                                                              | 100                                                                     | red / rot                          |
| GL 34D      | 200                                                                              | 200                                                                     | orange                             |
| GL 34G      | 400                                                                              | 400                                                                     | yellow / gelb                      |
| GL 34J      | 600                                                                              | 600                                                                     | green / grün                       |
| GL 34K      | 800                                                                              | 800                                                                     | blue / blau                        |
| GL 34M      | 1000                                                                             | 1000                                                                    | violet(t)                          |

|                                                                                                      |                          |                |                                |
|------------------------------------------------------------------------------------------------------|--------------------------|----------------|--------------------------------|
| 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, 60 Hz half sine-wave<br>Stoßstrom für eine 60 Hz Sinus-Halbwellen        | $T_A = 25^\circ\text{C}$ | $I_{FSM}$      | 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           |
| Operating junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur |                          | $T_j$<br>$T_s$ | – 50...+175°C<br>– 50...+175°C |

**Characteristics****Kennwerte**

|                                                                                             |                                                       |                                                                                      |                           |                |                                                       |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------|----------------|-------------------------------------------------------|
| Forward voltage<br>Durchlaßspannung                                                         | $T_j = 25^\circ\text{C}$                              | $I_F = 0.5\text{ A}$                                                                 | GL 34A - G<br>GL 34 J - M | $V_F$<br>$V_F$ | $< 1.2\text{ V}$<br>$< 1.3\text{ V}$                  |
| Leakage current<br>Sperrstrom                                                               | $T_A = 25^\circ\text{C}$<br>$T_A = 125^\circ\text{C}$ | $V_R = V_{RRM}$<br>$V_R = V_{RRM}$                                                   |                           | $I_R$<br>$I_R$ | $< 5\text{ }\mu\text{A}$<br>$< 50\text{ }\mu\text{A}$ |
| Typical reverse recovery time<br>Typische Sperrverzugszeit                                  |                                                       | $I_F = 0.5\text{ A}$ through/über<br>$I_R = 1\text{ A}$ to/auf $I_R = 0.25\text{ A}$ |                           | $t_{rr}$       | $1.5\text{ }\mu\text{s}$                              |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |                                                       |                                                                                      |                           | $R_{thA}$      | $< 150\text{ K/W}^1)$                                 |
| Thermal resistance junction to terminal<br>Wärmewiderstand Sperrschicht – Kontaktfläche     |                                                       |                                                                                      |                           | $R_{thT}$      | $< 70\text{ K/W}$                                     |



<sup>1)</sup> 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