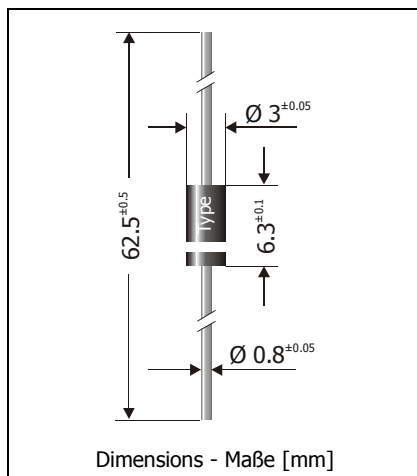


**1N5400K ... 1N5408K**  
**Si-Rectifiers – Si-Gleichrichter**

Version 2005-09-20



|                                                                                       |                     |
|---------------------------------------------------------------------------------------|---------------------|
| Nominal current<br>Nennstrom                                                          | 3 A                 |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 50...1000 V         |
| Plastic case<br>Kunststoffgehäuse                                                     | ~ DO-15<br>DO-204AC |
| Weight approx.<br>Gewicht ca.                                                         | 0.4 g               |
| Plastic material has UL classification 94V-0<br>Gehäusematerial UL94V-0 klassifiziert |                     |
| Standard packaging taped in ammo pack<br>Standard Lieferform gegurtet in Ammo-Pack    |                     |

**Maximum ratings****Grenzwerte**

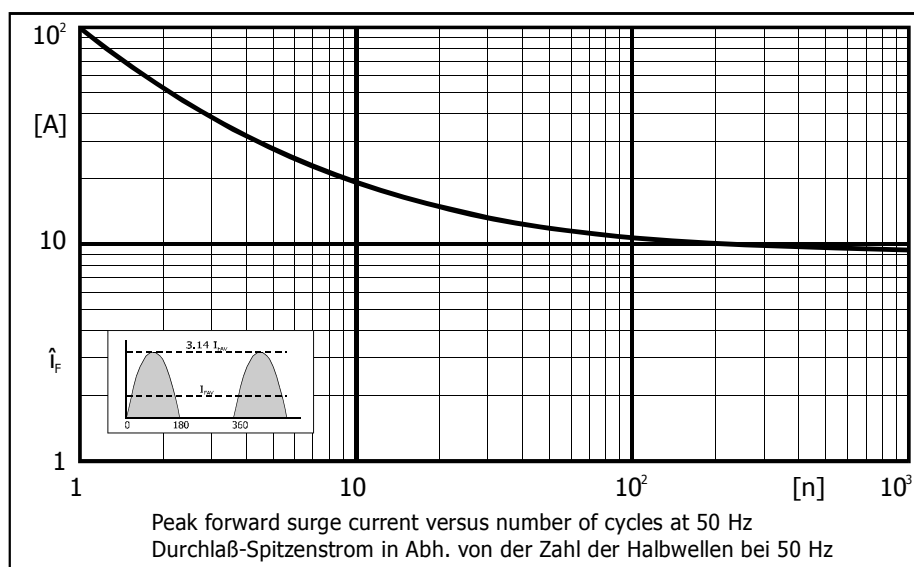
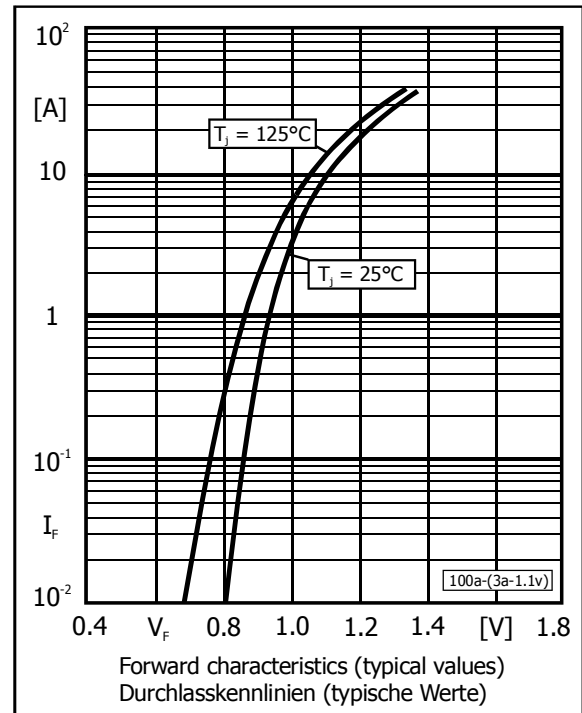
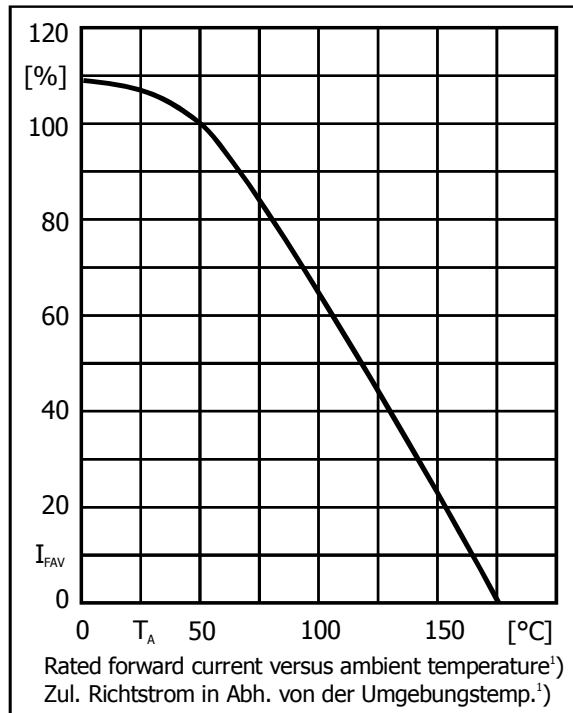
| Type<br>Typ | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] |
|-------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 1N5400K     | 50                                                                                   | 50                                                                      |
| 1N5401K     | 100                                                                                  | 100                                                                     |
| 1N5402K     | 200                                                                                  | 200                                                                     |
| 1N5404K     | 400                                                                                  | 400                                                                     |
| 1N5406K     | 600                                                                                  | 600                                                                     |
| 1N5407K     | 800                                                                                  | 800                                                                     |
| 1N5408K     | 1000                                                                                 | 1000                                                                    |

|                                                                                                     |                          |                |                              |
|-----------------------------------------------------------------------------------------------------|--------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last     | $T_A = 50^\circ\text{C}$ | $I_{FAV}$      | 3 A <sup>1)</sup>            |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                        | $f > 15\text{ Hz}$       | $I_{FRM}$      | 20 A <sup>1)</sup>           |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwellen | $T_A = 25^\circ\text{C}$ | $I_{FSM}$      | 100/110 A                    |
| Rating for fusing, Grenzlasterintegral, $t < 10\text{ ms}$                                          | $T_A = 25^\circ\text{C}$ | $i^2t$         | 50 A <sub>2S</sub>           |
| Junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur          |                          | $T_j$<br>$T_s$ | -50...+175°C<br>-50...+175°C |

1 Valid, if leads are kept at ambient temperature at a distance of 10 mm from case  
 Gültig, wenn die Anschlussdrähte in 10 mm Abstand von Gehäuse auf Umgebungstemperatur gehalten werden

**Characteristics**
**Kennwerte**

|                                                                                             |                          |                    |           |                           |
|---------------------------------------------------------------------------------------------|--------------------------|--------------------|-----------|---------------------------|
| Forward voltage – Durchlass-Spannung                                                        | $T_j = 25^\circ\text{C}$ | $I_F = 3\text{ A}$ | $V_F$     | $< 1.1\text{ V}$          |
| Leakage current – Sperrstrom                                                                | $T_j = 25^\circ\text{C}$ | $V_R = V_{RRM}$    | $I_R$     | $< 10\text{ }\mu\text{A}$ |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |                          |                    | $R_{thA}$ | $< 38\text{ K/W}^{1)}$    |
| Thermal resistance junction to leads<br>Wärmewiderstand Sperrschicht – Anschlussdraht       |                          |                    | $R_{thL}$ | $< 13\text{ K/W}$         |



1 Valid, if leads are kept at ambient temperature at a distance of 10 mm from case  
Gültig, wenn die Anschlussdrähte in 10 mm Abstand von Gehäuse auf Umgebungstemperatur gehalten werden