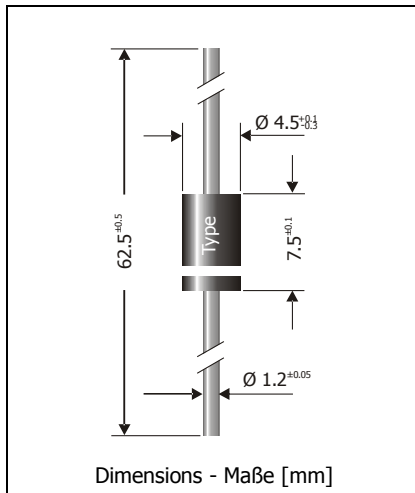


## 1N5400 ... 1N5408

### Silicon Rectifier Diodes – Silizium-Gleichrichterdioden

Version 2010-01-05



|   |             |
|---|-------------|
| Nominal current<br>Nennstrom  | 3 A         |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 50...1000 V |
| Plastic case<br>Kunststoffgehäuse   | ~ DO-201    |
| Weight approx.<br>Gewicht ca.   | 0.8 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] |
|-------------|--|---|
| 1N5400      | 50   | 50  |
| 1N5401      | 100  | 100   |
| 1N5402      | 200  | 200   |
| 1N5404      | 400  | 400   |
| 1N5406      | 600  | 600   |
| 1N5407      | 800  | 800   |
| 1N5408      | 1000   | 1000  |

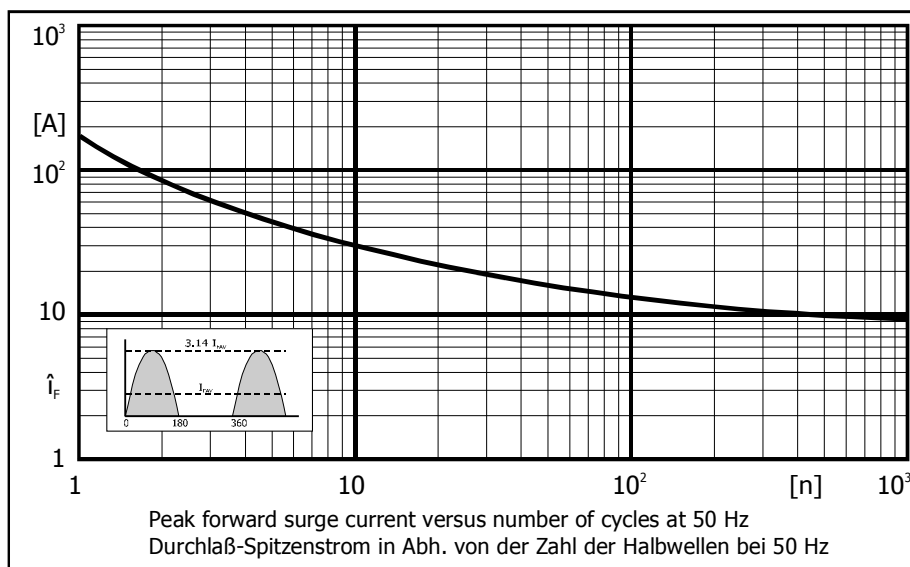
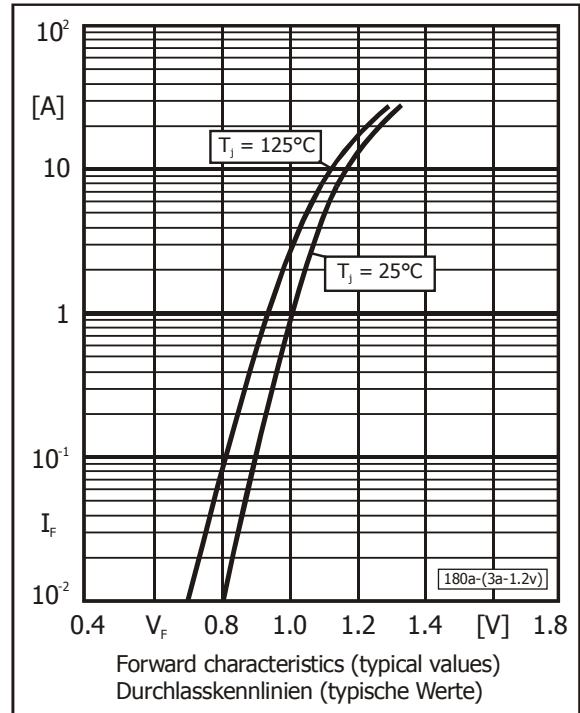
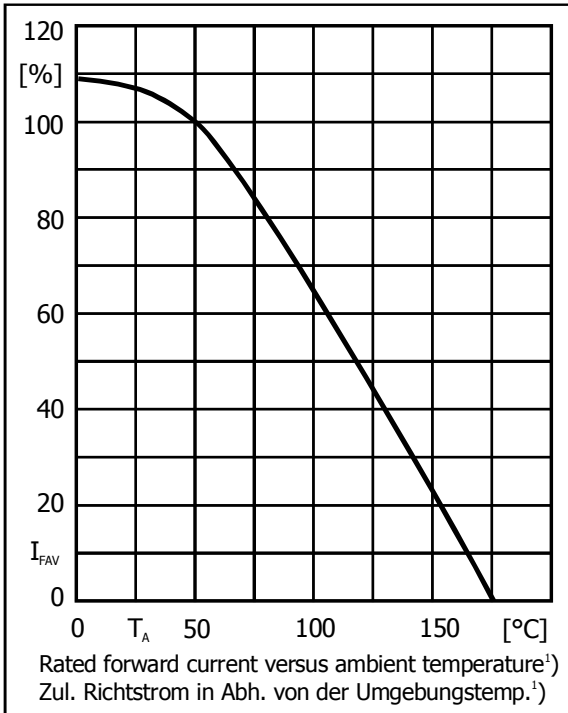
|  |                          |           |                      |
|--|--------------------------|-----------|----------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last    | $T_A = 50^\circ\text{C}$ | $I_{FAV}$ | 3 A <sup>1)</sup>    |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                       | $f > 15$ Hz              | $I_{FRM}$ | 30 A <sup>1)</sup>   |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwelle | $T_A = 25^\circ\text{C}$ | $I_{FSM}$ | 180/200 A            |
| Rating for fusing, Grenzlastintegral, $t < 10$ ms  | $T_A = 25^\circ\text{C}$ | $i^2t$    | 166 A <sup>2</sup> s |
| Junction temperature – Sperrschichttemperatur  |                          | $T_j$     | -50...+175°C         |
| Storage temperature – Lagerungstemperatur  |                          | $T_s$     | -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  | $T_j = 25^\circ\text{C}$ | $I_F = 3\text{ A}$ | $V_F$ | < 1.2 V            |                        |
| Leakage current – Sperrstrom  | $T_j = 25^\circ\text{C}$ | $V_R = V_{RRM}$    | $I_R$ | < 10 $\mu\text{A}$ |                        |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |                          |                    |       | $R_{thA}$          | < 25 K/W <sup>1)</sup> |
| Thermal resistance junction to leads<br>Wärmewiderstand Sperrschicht – Anschlussdraht       |                          |                    |       | $R_{thL}$          | < 10 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