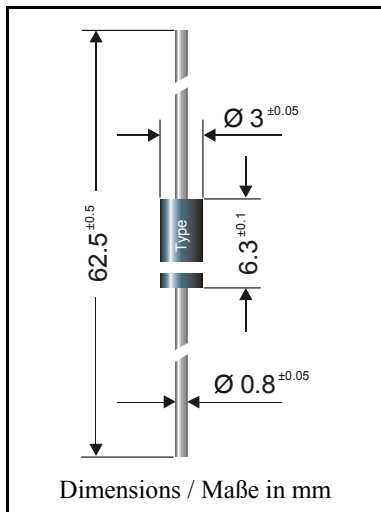


## Silicon Rectifiers

## Silizium Gleichrichter



|                                                                                       |                               |
|---------------------------------------------------------------------------------------|-------------------------------|
| Nominal current – Nennstrom                                                           | 3 A                           |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 50...1000 V                   |
| Plastic case<br>Kunststoffgehäuse                                                     | DO-15<br>DO-204AC             |
| Weight approx. – 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    | see page 16<br>siehe Seite 16 |

### 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] |
|-------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 1N 5400 K   | 50                                                                                   | 50                                                                      |
| 1N 5401 K   | 100                                                                                  | 100                                                                     |
| 1N 5402 K   | 200                                                                                  | 200                                                                     |
| 1N 5403 K   | 300                                                                                  | 300                                                                     |
| 1N 5404 K   | 400                                                                                  | 400                                                                     |
| 1N 5405 K   | 500                                                                                  | 500                                                                     |
| 1N 5406 K   | 600                                                                                  | 600                                                                     |
| 1N 5407 K   | 800                                                                                  | 800                                                                     |
| 1N 5408 K   | 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 Hz half sine-wave<br>Stoßstrom für eine 50 Hz Sinus-Halbwellen   | $T_A = 25^\circ\text{C}$ | $I_{FSM}$ | 100 A               |
| Rating for fusing – Grenzlastintegral, $t < 10\text{ ms}$                                       | $T_A = 25^\circ\text{C}$ | $i^2t$    | 50 A <sup>2</sup> s |

<sup>1)</sup> 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

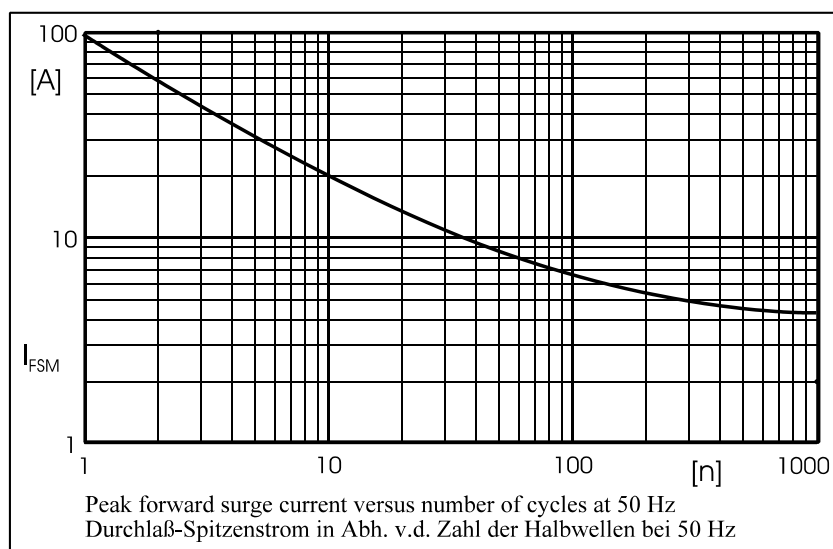
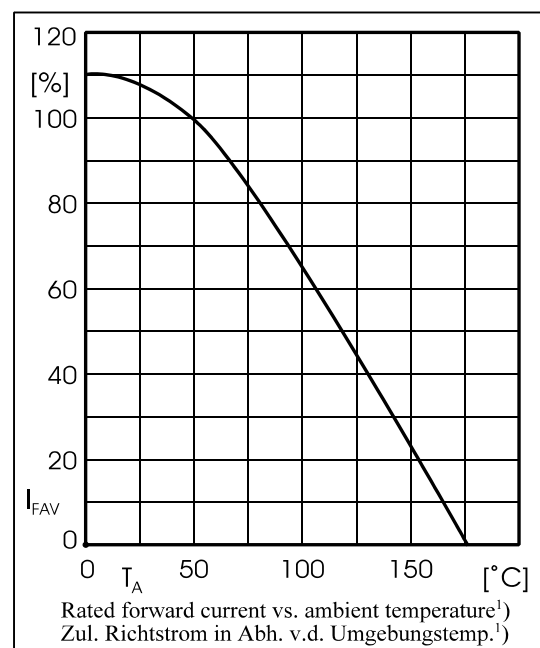
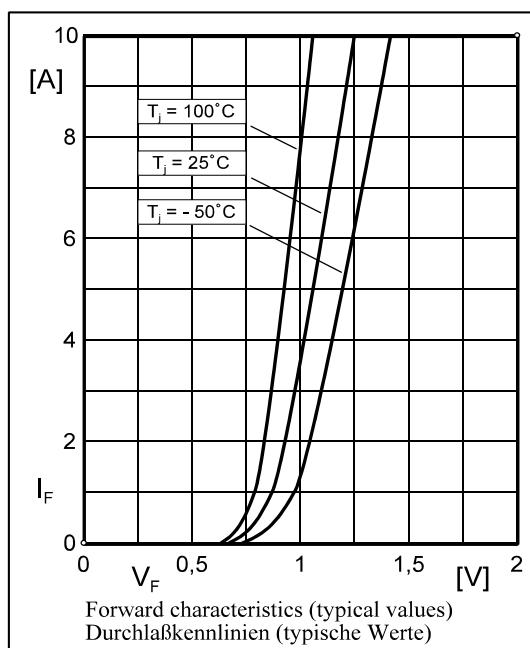
Operating junction temperature – Sperrschichttemperatur  
Storage temperature – Lagerungstemperatur

$T_j$  – 50...+175°C  
 $T_s$  – 50...+175°C

## Characteristics

## Kennwerte

|                                                                                             |                          |                    |           |                        |
|---------------------------------------------------------------------------------------------|--------------------------|--------------------|-----------|------------------------|
| Forward voltage – Durchlaßspannung                                                          | $T_j = 25^\circ\text{C}$ | $I_F = 3\text{ A}$ | $V_F$     | < 1.1 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 |                          |                    | $R_{thA}$ | < 40 K/W <sup>1)</sup> |



<sup>1)</sup> 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