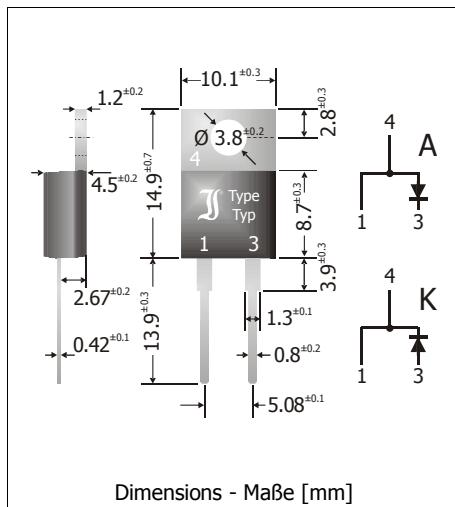


## FT2000AA ... FT2000KG

### Superfast Silicon Rectifiers – Single Diode / Two Polarities Superschnelle Silizium-Gleichrichter – Einzeldiode / Zwei Polaritäten

Version 2013-05-07



|   |            |
|---|------------|
| Nominal current<br>Nennstrom  | 20 A       |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 50...400 V |
| Plastic case<br>Kunststoffgehäuse   | TO-220AC   |
| Weight approx.<br>Gewicht ca.   | 1.8 g      |
| Plastic material has UL classification 94V-0<br>Gehäusematerial UL94V-0 klassifiziert |            |
| Standard packaging in tubes<br>Standard Lieferform in Stangen                         |            |



### Maximum ratings and Characteristics

### Grenz- und Kennwerte

| Type / Typ           | Repet. peak reverse voltage<br>Period. Spitzensperrspann. | Surge peak reverse volt.<br>Stoßspitzensperrspann. | Forward voltage<br>Durchlass-Spannung    |
|----------------------|---|--|--|
| Polarity / Polarität | $V_{RRM}$ [V]   | $V_{RSM}$ [V]                                      | $V_F$ [V] <sup>1)</sup>                  |
| K (Standard)         | A (Reverse)   |  | $I_F = 5 \text{ A}$ $I_F = 20 \text{ A}$ |
| FT2000KA             | FT2000AA  | 50   | < 0.84   < 0.96                          |
| FT2000KB             | FT2000AB  | 100  | < 0.84   < 0.96                          |
| FT2000KC             | FT2000AC  | 150  | < 0.84   < 0.96                          |
| FT2000KD             | FT2000AD  | 200  | < 0.84   < 0.96                          |
| FT2000KG             | FT2000AG  | 400  | < 0.84   < 0.96                          |

|  |                           |           |                        |
|--|---------------------------|-----------|------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last              | $T_C = 100^\circ\text{C}$ | $I_{FAV}$ | 20 A                   |
| Repetitive peak forward current<br>Periodischer Spitzenstrom   | $f > 15 \text{ Hz}$       | $I_{FRM}$ | 70 A <sup>2)</sup>     |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwelle           | $T_A = 25^\circ\text{C}$  | $I_{FSM}$ | 350/385 A              |
| Rating for fusing, $t < 10 \text{ ms}$<br>Grenzlastintegral, $t < 10 \text{ ms}$                             | $T_A = 25^\circ\text{C}$  | $i^2t$    | 612 A <sup>2</sup> s   |
| Junction temperature – Sperrschiesschichttemperatur<br>in DC forward mode – bei Gleichstrom-Durchlassbetrieb | $T_j$                     | $T_j$     | -50...+150°C<br>+200°C |
| Storage temperature – Lagerungstemperatur  | $T_S$                     |           | -50...+175°C           |

<sup>1</sup>  $T_j = 25^\circ\text{C}$ <sup>2</sup> Max. temperature of the case  $T_C = 100^\circ\text{C}$  – Max. Temperatur des Gehäuses  $T_C = 100^\circ\text{C}$

**Characteristics**
**Kennwerte**

|   |  |           |  |
|---|--|-----------|--|
| Leakage current<br>Sperrstrom   | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$<br>$T_j = 125^\circ\text{C}$              | $I_R$     | < 5 $\mu\text{A}$<br>typ. 40 $\mu\text{A}$ |
| Reverse recovery time<br>Sperrverzug  | $I_F = 0.5 \text{ A through/über}$<br>$I_R = 1 \text{ A to } I_R = 0.25 \text{ A}$ | $t_{rr}$  | < 200 ns                                   |
| Thermal resistance junction to case<br>Wärmewiderstand Sperrsicht – Gehäuse |  | $R_{thC}$ | < 1.5 K/W                                  |

