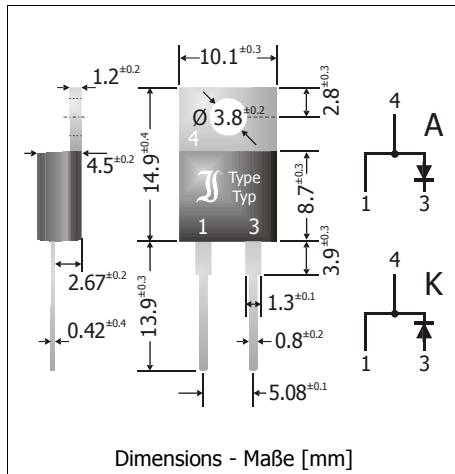


## FT2000AA ... FT2000KG

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

Version 2010-03-31



|   |            |
|---|------------|
| 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      | Polarity / Polarität | Repet. peak reverse voltage<br>Period. Spitzensperrspanng.<br>$V_{RRM}$ [V] | Surge peak reverse volt.<br>Stoßspitzensperrspanng.<br>$V_{RSM}$ [V] | Forward voltage<br>Durchlass-Spannung<br>$V_F$ [V] <sup>1)</sup> | $I_F = 5$ A | $I_F = 20$ A |
|-----------------|----------------------|---|--|--|-------------|--------------|
| K<br>(Standard) | A<br>(Reverse)       |   |  |  |             |              |
| FT2000KA        | FT2000AA             | 50  | 50   | < 0.84   | < 0.96      |              |
| FT2000KB        | FT2000AB             | 100   | 100  | < 0.84   | < 0.96      |              |
| FT2000KD        | FT2000AD             | 200   | 200  | < 0.84   | < 0.96      |              |
| FT2000KG        | FT2000AG             | 400   | 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   | $f > 15$ Hz               | $I_{FRM}$ | 80 A <sup>2)</sup>     |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwelle   | $T_A = 25^\circ\text{C}$  | $I_{FSM}$ | 375/390 A              |
| Rating for fusing, $t < 10$ ms<br>Grenzlastintegral, $t < 10$ ms                                     | $T_A = 25^\circ\text{C}$  | $i^2t$    | 680 A <sup>2</sup> s   |
| Junction temperature – Sperrsichttemperatur<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   | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$   | $I_R$     | < 25 $\mu\text{A}$ |
| 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          |

