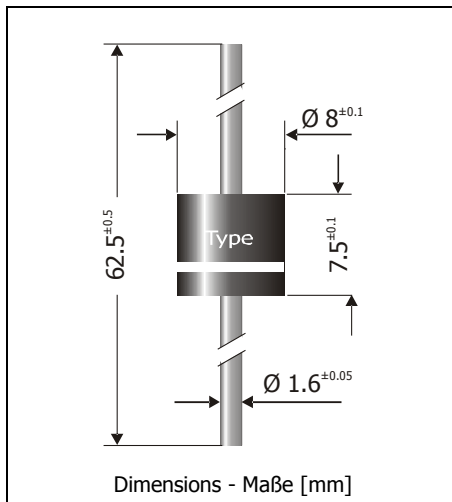


## FX2000A ... FX2000G

### Superfast Silicon Rectifier Diodes Superschnelle Silizium-Gleichrichterdioden

Version 2013-06-28



|                                                                                       |                |
|---------------------------------------------------------------------------------------|----------------|
| Nominal Current<br>Nennstrom                                                          | 20 A           |
| Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung                   | 50...400 V     |
| Plastic case<br>Kunststoffgehäuse                                                     | Ø 8 x 7.5 [mm] |
| Weight approx.<br>Gewicht ca.                                                         | 2.0 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**

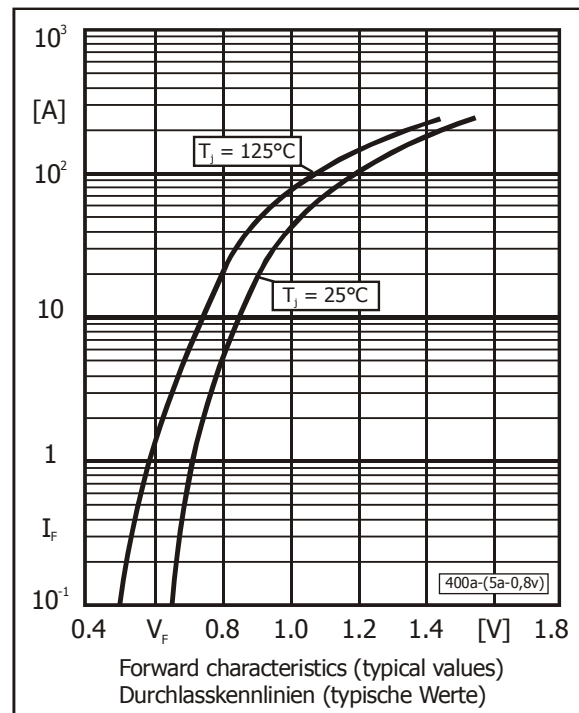
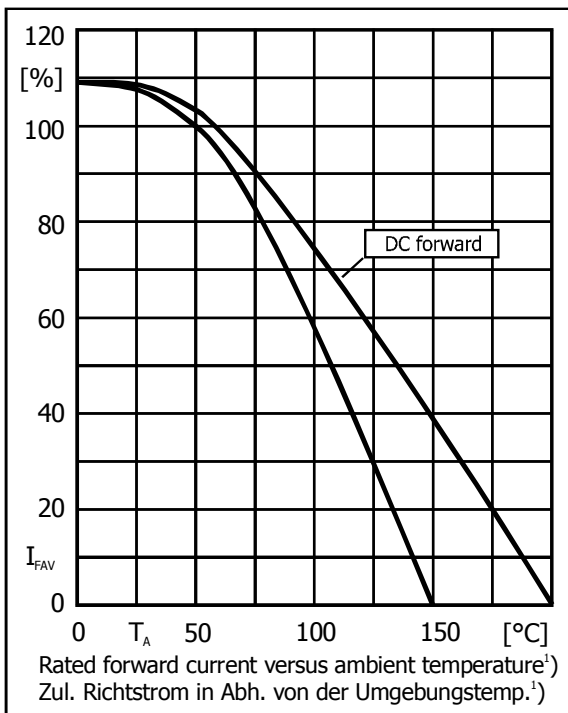
| Type<br>Typ | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] |
|-------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| FX2000A     | 50                                                                                   | 50                                                                      |
| FX2000B     | 100                                                                                  | 100                                                                     |
| FX2000D     | 200                                                                                  | 200                                                                     |
| FX2000F     | 300                                                                                  | 300                                                                     |
| FX2000G     | 400                                                                                  | 400                                                                     |

|                                                                                                        |                          |           |                        |
|--------------------------------------------------------------------------------------------------------|--------------------------|-----------|------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last        | $T_A = 50^\circ\text{C}$ | $I_{FAV}$ | 20 A <sup>1)</sup>     |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                           | $f > 15$ Hz              | $I_{FRM}$ | 130 A <sup>1)</sup>    |
| Peak forward surge current, 50/60 Hz half sine-wave<br>Stoßstrom für eine 50/60 Hz Sinus-Halbwellen    | $T_A = 25^\circ\text{C}$ | $I_{FSM}$ | 650/715 A              |
| Rating for fusing, $t < 10$ ms<br>Grenzlastintegral, $t < 10$ ms                                       | $T_A = 25^\circ\text{C}$ | $i^2t$    | 2112 A <sup>2</sup> s  |
| Junction temperature – Sperrschichttemperatur<br>in DC forward mode – bei Gleichstrom-Durchlassbetrieb |                          | $T_j$     | -50...+150°C<br>+200°C |
| Storage temperature – Lagerungstemperatur                                                              |                          | $T_s$     | -50...+175°C           |

<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 vom Gehäuse auf Umgebungstemperatur gehalten werden

**Characteristics**
**Kennwerte**

|                                                                                             |                                                                                      |                |                                          |
|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------|------------------------------------------|
| Forward Voltage – Durchlass-Spannung                                                        | $T_j = 25^\circ\text{C}$<br>$I_F = 5\text{ A}$<br>$I_F = 20\text{ A}$                | $V_F$<br>$V_F$ | < 0.82 V<br>< 0.94 V                     |
| Leakage current – Sperrstrom                                                                | $T_j = 25^\circ\text{C}$<br>$T_j = 100^\circ\text{C}$                                | $I_R$<br>$I_R$ | < 5 $\mu\text{A}$<br>< 200 $\mu\text{A}$ |
| Reverse recovery time<br>Sperrverzug                                                        | $I_F = 0.5\text{ A}$ through/über<br>$I_R = 1\text{ A}$ to/auf $I_R = 0.25\text{ A}$ | $t_{rr}$       | < 200 ns                                 |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |                                                                                      | $R_{thA}$      | < 8 K/W <sup>1)</sup>                    |
| Thermal resistance junction to leads<br>Wärmewiderstand Sperrschicht – Anschlussdraht       |                                                                                      | $R_{thL}$      | < 1.5 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 vom Gehäuse auf Umgebungstemperatur gehalten werden