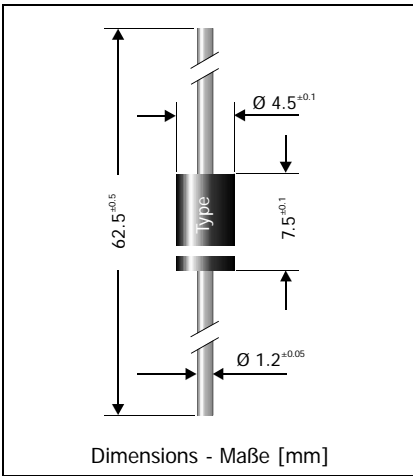


FE3A ... FE3G
Superfast Switching Silicon-Rectifiers
Superschnelle Silizium-Gleichrichter

Version 2005-11-08



| | |
|---|------------|
| Nominal current Nennstrom | 3 A |
| Repetitive peak reverse voltage Periodische Spitzensperrspannung | 50...400 V |
| Plastic case Kunststoffgehäuse | ~ DO-201 |
| Weight approx. Gewicht ca. | 1 g |
| Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert | |
| Standard packaging taped in ammo pack Standard Lieferform gegurtet in Ammo-Pack | |



Maximum ratings

Grenzwerte

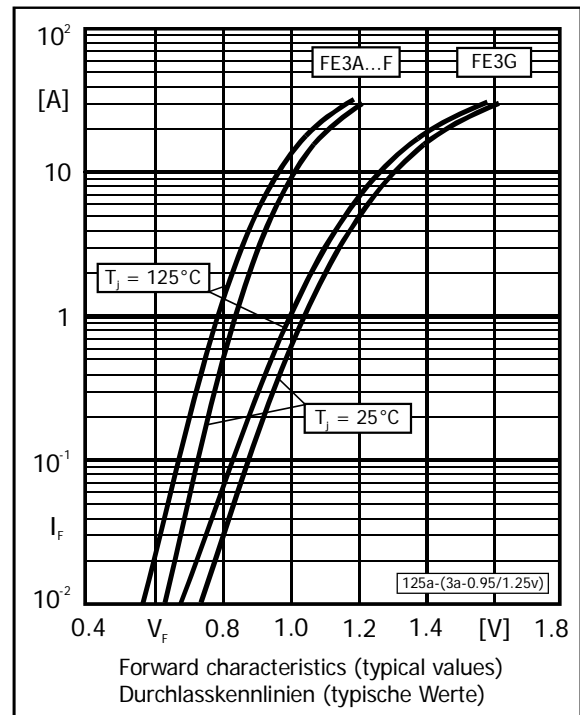
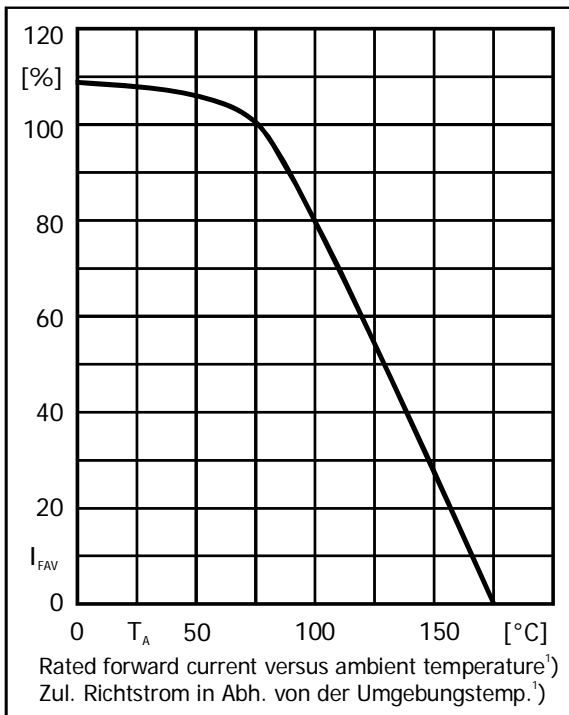
| Type Typ | Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] | Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V] | Forward voltage Durchlass-Spannung V_F at/bei $I_F = 3 A$ |
|-------------|--|---|---|
| FE3A | 50 | 50 | < 0.95 |
| FE3B | 100 | 100 | < 0.95 |
| FE3D | 200 | 200 | < 0.95 |
| FE3F | 300 | 300 | < 0.95 |
| FE3G | 400 | 400 | < 1.25 |

| | | | |
|---|--------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last | $T_A = 75^\circ C$ | I_{FAV} | 3 A |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15 Hz$ | I_{FRM} | 30 A ¹⁾ |
| Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwellen | $T_A = 25^\circ C$ | I_{FSM} | 125/135 A |
| Rating for fusing, $t < 10 ms$ Grenzlastintegral, $t < 10 ms$ | $T_A = 25^\circ C$ | i^2t | 78 A ² s |
| Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_J T_S | -50...+175°C -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 vom Gehäuse auf Umgebungstemperatur gehalten werden

Characteristics
Kennwerte

| | | | |
|---|--|-----------|------------------------|
| Leakage current – Sperrstrom | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$ | I_R | < 5 μA |
| Reverse recovery time Sperrverzug | $I_F = 0.5\text{ A}$ through/über $I_R = 1\text{ A}$ to $I_R = 0.25\text{ A}$ | t_{rr} | < 50 ns |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft | | R_{thA} | < 25 K/W ¹⁾ |
| Thermal resistance junction to leads Wärmewiderstand Sperrschicht – Anschlussdraht | | R_{thT} | < 8 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