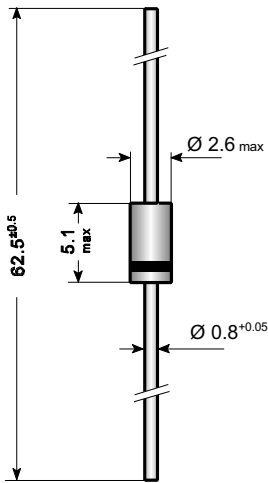


**1N 4001 ... 1N 4007, 1N 4007-1300
EM 513, EM 516, EM 518**

Silicon Rectifier

Silizium Gleichrichter



Dimensions / Maße in mm

| | |
|---|-------------|
| Nominal current – Nennstrom | 1 A |
| Repetitive peak reverse voltage Periodische Spitzensperrspannung | 50...2000 V |
| Plastic case Kunststoffgehäuse | DO-41 |
| Weight approx. – Gewicht ca. | 0.4 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] |
|--------------|--|---|
| 1N 4001 | 50 | 50 |
| 1N 4002 | 100 | 100 |
| 1N 4003 | 200 | 200 |
| 1N 4004 | 400 | 400 |
| 1N 4005 | 600 | 600 |
| 1N 4006 | 800 | 800 |
| 1N 4007 | 1000 | 1000 |
| 1N 4007-1300 | 1300 | 1300 |
| EM 513 | 1600 | 1600 |
| EM 516 | 1800 | 1800 |
| EM 518 | 2000 | 2000 |

| | | | |
|--|---|------------------------|---|
| Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschtaltung mit R-Last | $T_A = 75^\circ\text{C}$ $T_A = 100^\circ\text{C}$ | I_{FAV} I_{FAV} | 1 A ¹⁾ 0.75 A ¹⁾ |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15$ Hz | I_{FRM} | 10 A ¹⁾ |

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 von Gehäuse auf Umgebungstemperatur gehalten werden

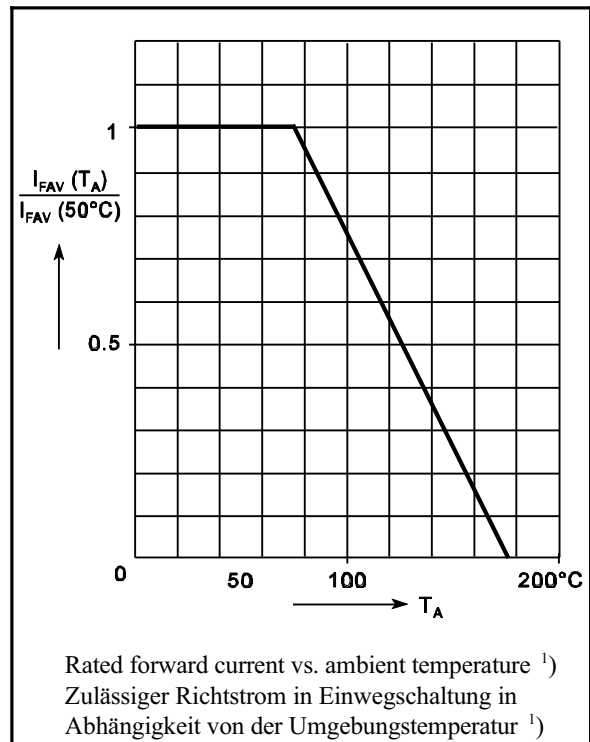
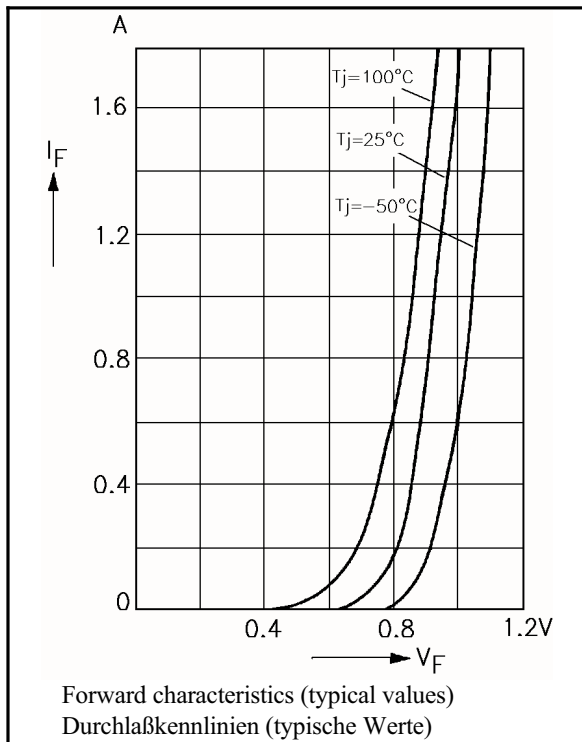
**1N 4001 ... 1N 4007, 1N 4007-1300
EM 513, EM 516, EM 518**

| | | | |
|--|--------------------------|------------------|-----------------------|
| Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 12.5 A ² s |
| Peak fwd. surge current, 50 Hz half sine-wave Stoßstrom für eine 50 Hz Sinus-Halbwelle, | $T_A = 25^\circ\text{C}$ | I_{FSM} | 50 A |
| Operating junction temperature – Sperrschichttemperatur | | T_j | - 50...+175°C |
| Storage temperature – Lagerungstemperatur | | T_s | - 50...+175°C |

Characteristics

Kennwerte

| | | | | |
|---|---------------------------|------------------------|------------------|------------------------|
| Forward voltage – Durchlaßspannung | $T_j = 25^\circ\text{C}$ | $I_F = 1$ A | V_F | < 1.1 V |
| Leakage current – Sperrstrom | $T_j = 25^\circ\text{C}$ | $V_R = V_{\text{RRM}}$ | I_R | < 5 μA |
| | $T_j = 100^\circ\text{C}$ | $V_R = V_{\text{RRM}}$ | I_R | < 50 μA |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft | | | R_{thA} | < 45 K/W ¹⁾ |



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 von Gehäuse auf Umgebungstemperatur gehalten werden