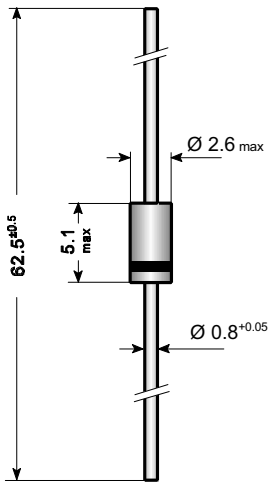


**1N 4001 ... 1N 4007, 1N 4007-1300
EM 513, EM 516, EM 518**

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 Einwegschaltung 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

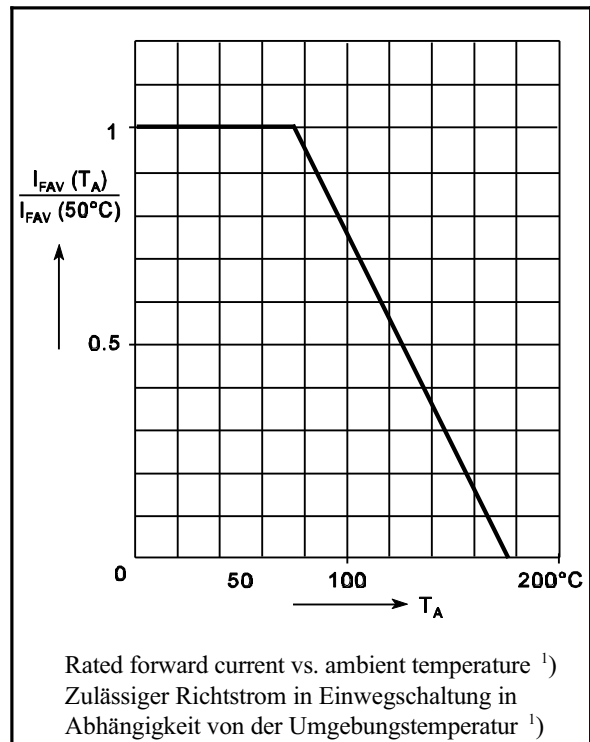
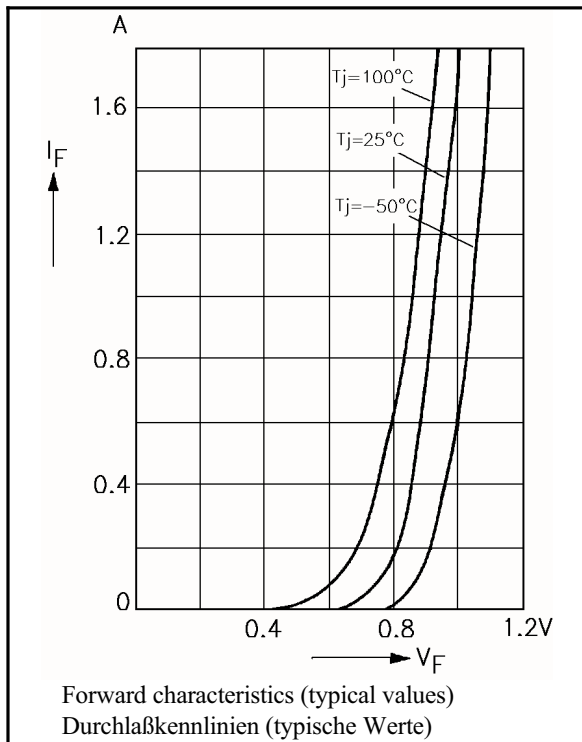
**1N 4001 ... 1N 4007, 1N 4007-1300
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Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$	i^2t	12.5 A ² s
Peak fwd. surge current, 50 Hz half sine-wave Stoßstrom für eine 50 Hz Sinus-Halbwelle,	$T_A = 25^\circ\text{C}$	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