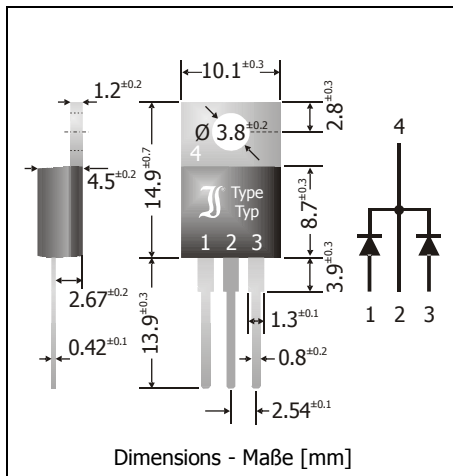


### 30CTQ035 ... 30CTQ045

#### High Temperature Schottky Rectifier – Common Cathode Hochtemperatur Schottky Gleichrichterdiode – Gemeinsame Kathode

Version 2013-05-07



Nominal current Nennstrom	2 x 15 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	35...45 V
Plastic case Kunststoffgehäuse	TO-220AB
Weight approx. Gewicht ca.	1.8 g
Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert	
Standard packaging in tubes Standard Lieferform in Stangen	



#### Maximum ratings and Characteristics

#### Grenz- und Kennwerte

Type Typ	Repetitive peak reverse voltage Periodische Spitzensperrspannung $V_{RRM}$ [V] <sup>1)</sup>	Surge peak reverse voltage Stoßspitzensperrspannung $V_{RSM}$ [V] <sup>1)</sup>	Forward voltage Durchlass-Spannung $V_F$ [V] <sup>1)</sup> , $T_j = 25^\circ\text{C}$	
			$I_F = 5\text{ A}$	$I_F = 15\text{ A}$
30CTQ035	35	35	< 0.52	< 0.62
30CTQ040	40	40	< 0.52	< 0.62
30CTQ045	45	45	< 0.52	< 0.62

Max. average forward current, Dauergrenzstrom	$T_C = 127^\circ\text{C}$ $T_C = 127^\circ\text{C}$	$I_{FAV}$ $I_{FAV}$	15 A <sup>2)</sup> 30 A <sup>3)</sup>
Repetitive peak forward current Periodischer Spitzenstrom	$f > 15\text{ Hz}$	$I_{FRM}$	53 A <sup>4)</sup>
Peak forward surge current, 50 Hz half sine-wave Stoßstrom für eine 50 Hz Sinus-Halbwellen	$T_A = 25^\circ\text{C}$	$I_{FSM}$	265 A <sup>1)</sup>
Rating for fusing, $t < 10\text{ ms}$ Grenzlastintegral, $t < 10\text{ ms}$	$T_A = 25^\circ\text{C}$	$i^2t$	351 A <sup>2</sup> s <sup>1)</sup>
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		$T_j$ $T_s$	-50...+175°C -50...+175°C

1 Per diode – Pro Diode

2 50% Duty Cycle, Rectangular waveform - 50% Duty Cycle, Rechteckwellenform

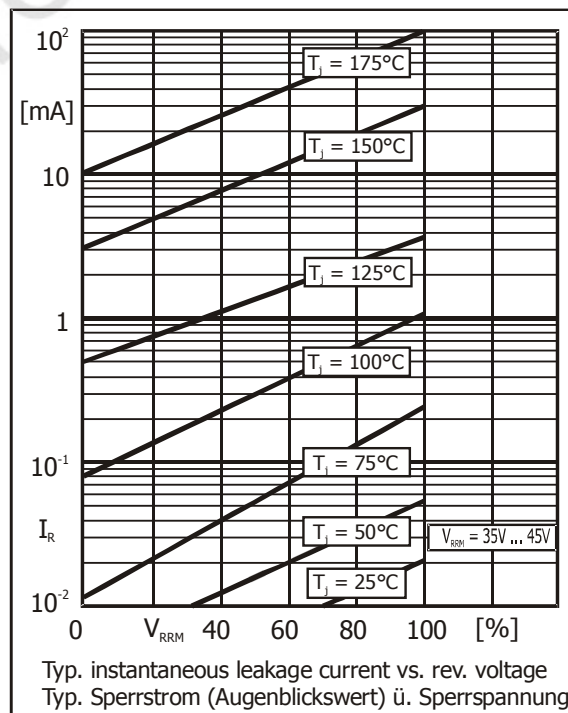
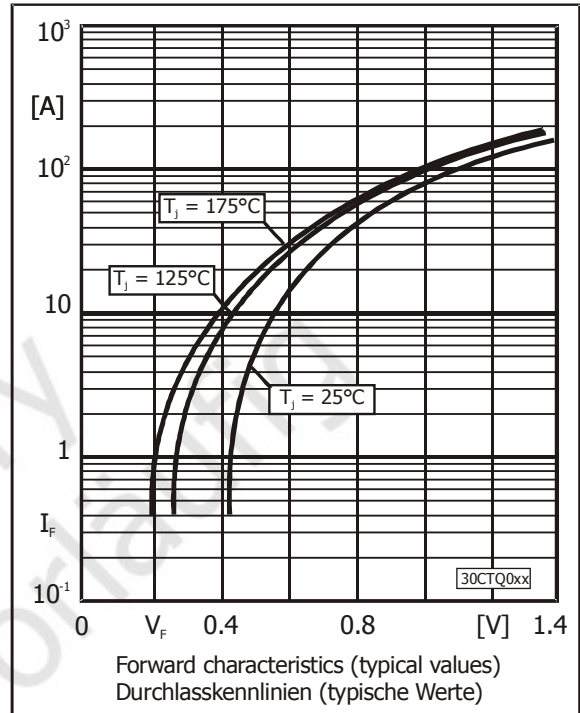
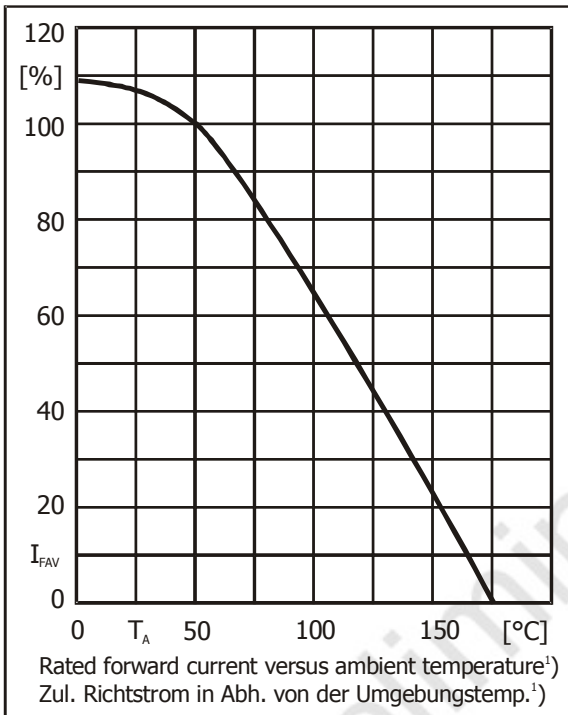
3 Per device (parallel operation) – Pro Bauteil (Parallelbetrieb)

4 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 Sperrstrom	$T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$ $T_j = 125^\circ\text{C}$ $V_R = V_{RRM}$	$I_R$	< 50 $\mu\text{A}$ < 15 mA
Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse		$R_{thc}$	< 3.25 $\text{K/W}^{1)}$
Maximum Junction Capacitance Maximale Sperrschichtkapazität		$C_j$	900 $\text{pF}^{1)}$



1 Per diode – Pro Diode