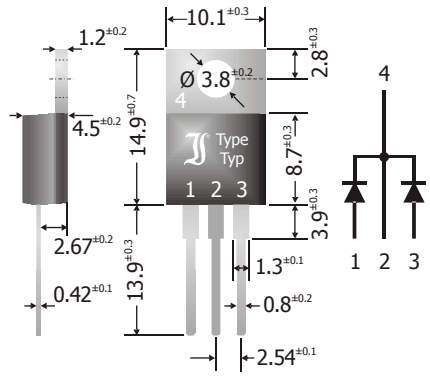
30CTQ035 ... 30CTQ045

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

Version 2013-05-07



Dimensions - Maße [mm]

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	

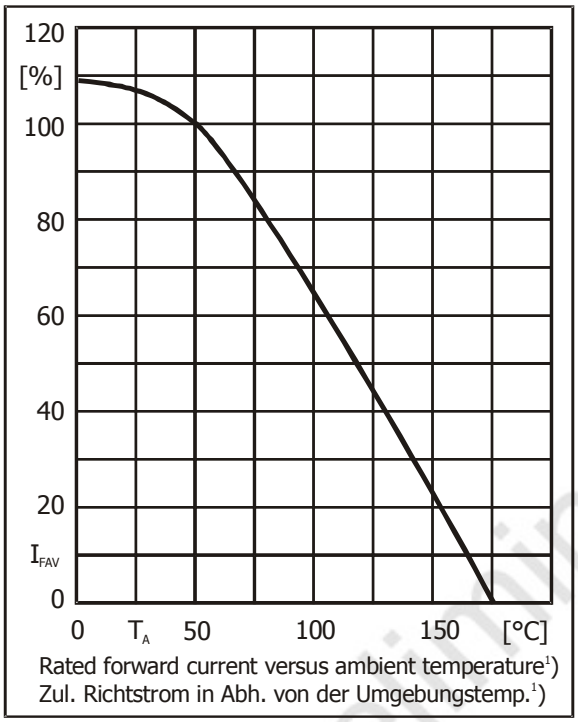
Maximum ratings and Characteristics **Grenz- und Kennwerte**

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

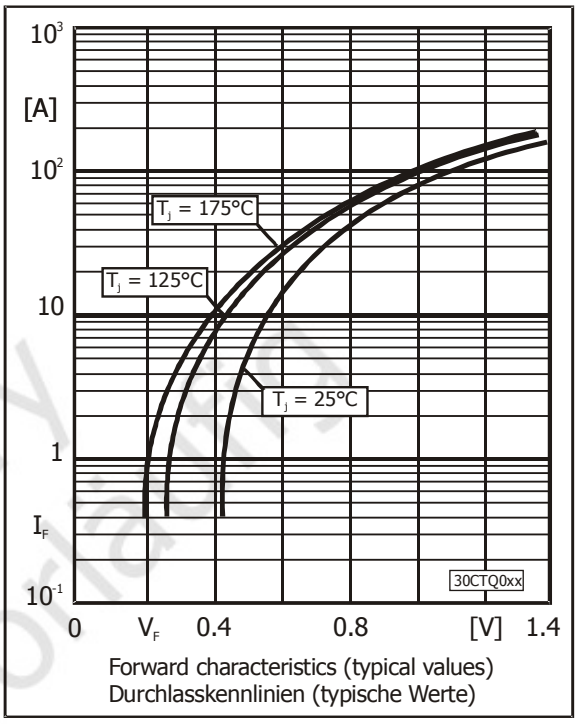
Max. average forward current, Dauergrenzstrom	T_C = 127°C T_C = 127°C	I_{FAV} I_{FAV}	15 A [2] 30 A [3]
Repetitive peak forward current Periodischer Spitzenstrom	f > 15 Hz	I_{FRM}	53 A [4]
Peak forward surge current, 50 Hz half sine-wave Stoßstrom für eine 50 Hz Sinus-Halbwelle	T_A = 25°C	I_{FSM}	265 A [1]
Rating for fusing, t < 10 ms Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	351 A^2s [1]
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°C – Max. Temperatur des Gehäuses T_C = 100°C

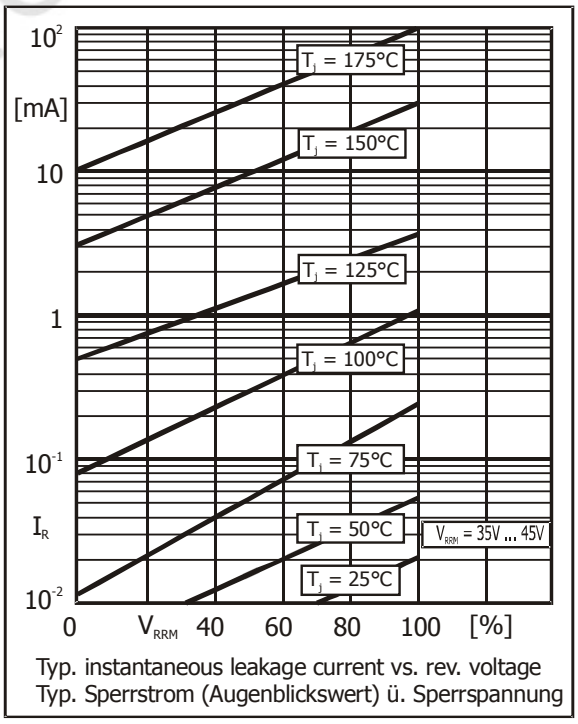
Characteristics			**Kennwerte**
Leakage current Sperrstrom	T_j = 25°C $V_R = V_{RRM}$ T_j = 125°C $V_R = V_{RRM}$	I_R	< 50 µA < 15 mA
Thermal resistance junction to case Wärmewiderstand Sperrschicht – Gehäuse		R_{thC}	< 3.25 K/W [1])
Maximum Junction Capacitance Maximale Sperrschichtkapazität		C_J	900 pF [1])



Rated forward current versus ambient temperature[1])
Zul. Richtstrom in Abh. von der Umgebungstemp.[1])



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)



Typ. instantaneous leakage current vs. rev. voltage
Typ. Sperrstrom (Augenblickswert) ü. Sperrspannung

1 Per diode – Pro Diode

