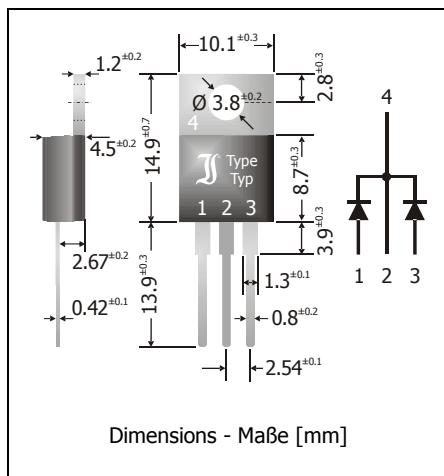


SBCT1020 ... SBCT10100

Schottky Barrier Rectifier Diodes – Common Cathode
Schottky-Barrier-Gleichrichterdioden – Gemeinsame Kathode

Version 2013-05-07



Nominal Current

10 A

Repetitive peak reverse voltage
Periodische Spitzensperrspannung

20...100 V

Plastic case
Kunststoffgehäuse

TO-220AB

Weight approx.
Gewicht ca.

2.2g

Plastic material has UL classification 94V-0
Gehäusematerial UL94V-0 klassifiziertStandard packaging in tubes
Standard Lieferform in Stangen

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 [V] ¹⁾	$I_F = 5$ A	$I_F = 10$ A
SBCT1020	20	20	< 0.55	< 0.63	
SBCT1030	30	30	< 0.55	< 0.63	
SBCT1040	40	40	< 0.55	< 0.63	
SBCT1045	45	45	< 0.55	< 0.63	
SBCT1050	50	50	< 0.70	< 0.79	
SBCT1060	60	60	< 0.70	< 0.79	
SBCT1090	90	90	< 0.85	< 0.92	
SBCT10100	100	100	< 0.85	< 0.92	

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	$T_c = 100^\circ\text{C}$	I_{FAV} I_{FAV}	5 A ¹⁾ 10 A ²⁾
Repetitive peak forward current Periodischer Spitzenstrom	$f > 15$ Hz	I_{FRM}	20 A ²⁾
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	$T_A = 25^\circ\text{C}$	I_{FSM}	100/120 A ²⁾
Rating for fusing, $t < 10$ ms Grenzlastintegral, $t < 10$ ms	$T_A = 25^\circ\text{C}$	i^2t	50 A ² s ²⁾
Junction temperature – Sperrsichttemperatur Storage temperature – Lagerungstemperatur	T_j T_s		-50...+150°C -50...+175°C

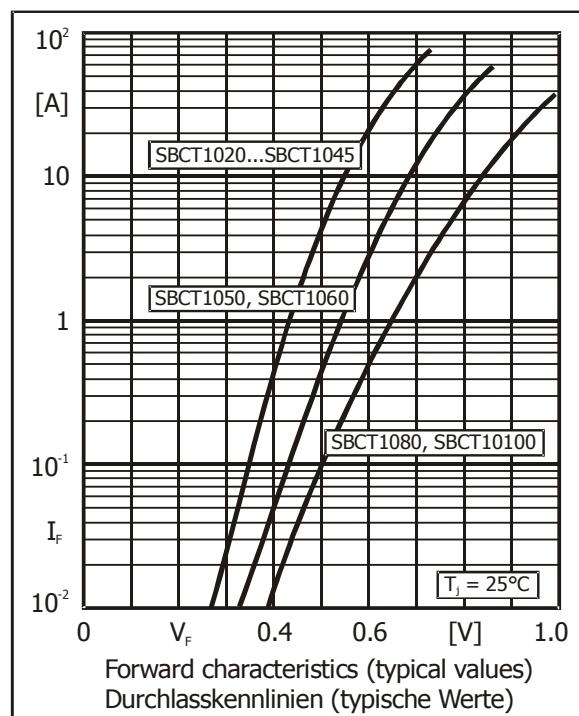
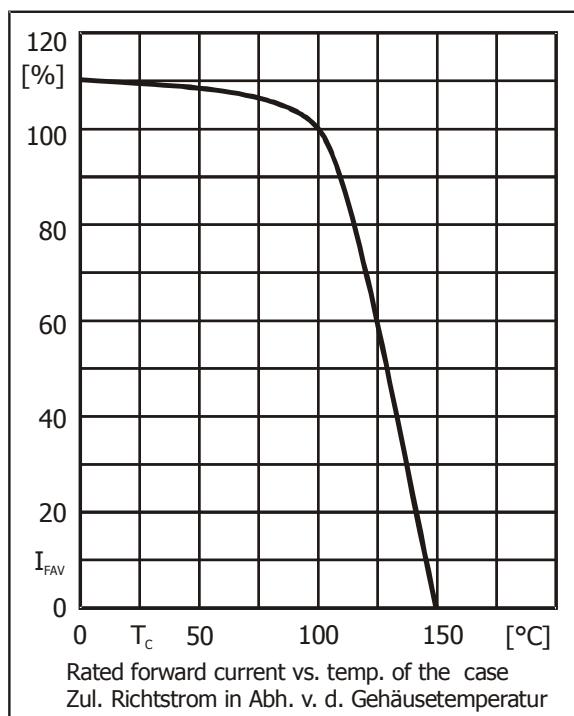
1 $T_j = 25^\circ\text{C}$

1 Per diode – Pro Diode

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

Characteristics
Kennwerte

Leakage current Sperrstrom	$T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$	$V_R = V_{RRM}$	I_R	< 300 μA ¹⁾ < 7 mA ¹⁾
Thermal resistance junction to case Wärmewiderstand Sperrsicht - Gehäuse			R_{thC}	3.0 K/W ²⁾


¹ Per diode – Pro Diode

² Per device (parallel operation) – Pro Bauteil (Parallelbetrieb)