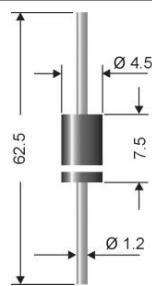


SB 320...SB 3100



Axial lead diode

Schottky barrier rectifiers diodes

SB 320...SB 3100

Forward Current: 3 A

Reverse Voltage: 20 to 100 V

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0

Mechanical Data

- Plastic case DO-201
- Weight approx.: 1 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 1700 pieces per ammo

1) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case

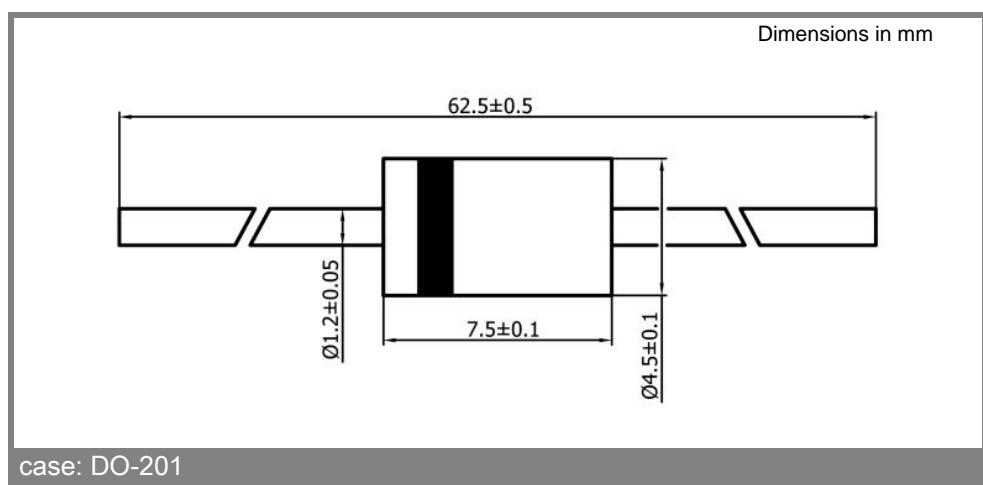
2) $I_F = 3 \text{ A}$, $T_j = 25^\circ\text{C}$

3) $T_A = 25^\circ\text{C}$

Type	Repetitive peak reverse voltage V_{RRM} V	Surge peak reverse voltage V_{RSM} V	Max. reverse recovery time t_{rr} ns	Max. forward voltage $V_F^2)$
SB 320	20	20	-	0,50
SB 330	30	30	-	0,50
SB 340	40	40	-	0,50
SB 350	50	50	-	0,70
SB 360	60	60	-	0,70
SB 390	90	90	-	0,79
SB 3100	100	100	-	0,79

Absolute Maximum Ratings		$T_c = 25^\circ\text{C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
I_{FAV}	Max. averaged fwd. current, R-load, $T_A = 50^\circ\text{C}$ ¹⁾	3	A
I_{FRM}	Repetitive peak forward current $f > 15 \text{ Hz}^1)$	15	A
I_{FSM}	Peak forward surge current 50 Hz half sinus-wave ³⁾	100	A
i^2t	Rating for fusing, $t < 10 \text{ ms}$ ³⁾	50	A ² s
R_{thA}	Max. thermal resistance junction to ambient ¹⁾	25	K/W
R_{thT}	Max. thermal resistance junction to terminals ¹⁾	8	K/W
T_j	Operating junction temperature	-50...+150	°C
T_s	Storage temperature	-50...+175	°C

Characteristics		$T_c = 25^\circ\text{C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
I_R	Maximum leakage current, $T_j = 25^\circ\text{C}$; $V_R = V_{RRM}$	< 0,50	mA
	$T_j = 100^\circ\text{C}$; $V_R = V_{RRM}$	< 10,0	mA
C_J	Typical junction capacitance (at MHz and applied reverse voltage of V)	-	pF
Q_{rr}	Reverse recovery charge ($U_R = V$; $I_F = A$; $dI_F/dt = A/\text{ms}$)	-	μC
E_{RSM}	Non repetitive peak reverse avalanche energy ($I_R = \text{mA}$; $T_j = ^\circ\text{C}$; inductive load switched off)	-	mJ



SB 320...SB 3100

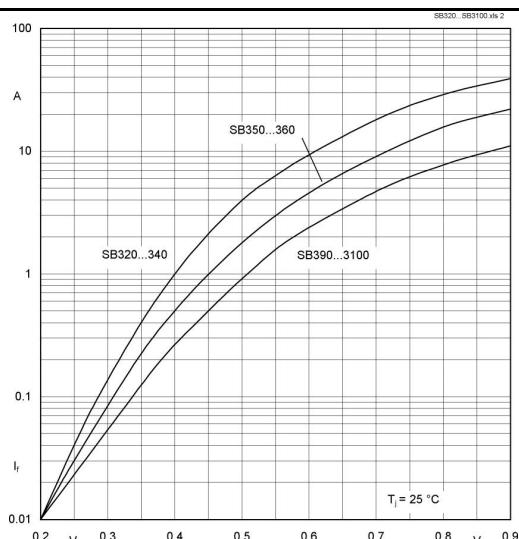


Fig. 1 Forward characteristic (typical values)

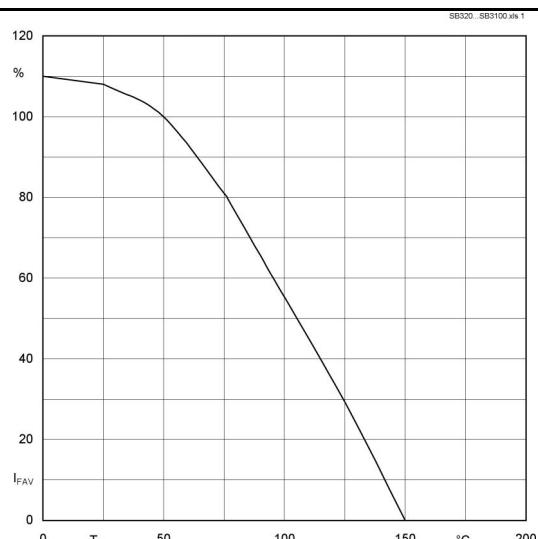


Fig. 2 Rated forward current vs. ambient temperature ¹⁾