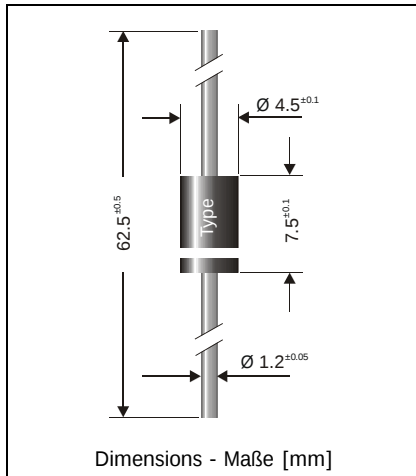


**SB320 ... SB3100**
**Schottky Barrier Rectifiers**  
**Schottky-Barrier-Gleichrichter**

Version 2006-04-18


 Nominal current  
 Nennstrom

3 A

 Repetitive peak reverse voltage  
 Periodische Spitzensperrspannung

20...100 V

 Plastic case  
 Kunststoffgehäuse

~ DO-201

 Weight approx.  
 Gewicht ca.

1 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 and Characteristics****Grenz- und Kennwerte**

| Type<br>Typ | Repetitive peak reverse voltage<br>Periodische Spitzensperrspannung<br>$V_{RRM}$ [V] | Surge peak reverse voltage<br>Stoßspitzensperrspannung<br>$V_{RSM}$ [V] | Forward voltage<br>Durchlass-Spannung<br>$V_F$ [V] <sup>1)</sup> |
|-------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------|
| SB320       | 20                                                                                   | 20                                                                      | < 0.50                                                           |
| SB330       | 30                                                                                   | 30                                                                      | < 0.50                                                           |
| SB340       | 40                                                                                   | 40                                                                      | < 0.50                                                           |
| SB350       | 50                                                                                   | 50                                                                      | < 0.70                                                           |
| SB360       | 60                                                                                   | 60                                                                      | < 0.70                                                           |
| SB390       | 90                                                                                   | 90                                                                      | < 0.79                                                           |
| SB3100      | 100                                                                                  | 100                                                                     | < 0.79                                                           |

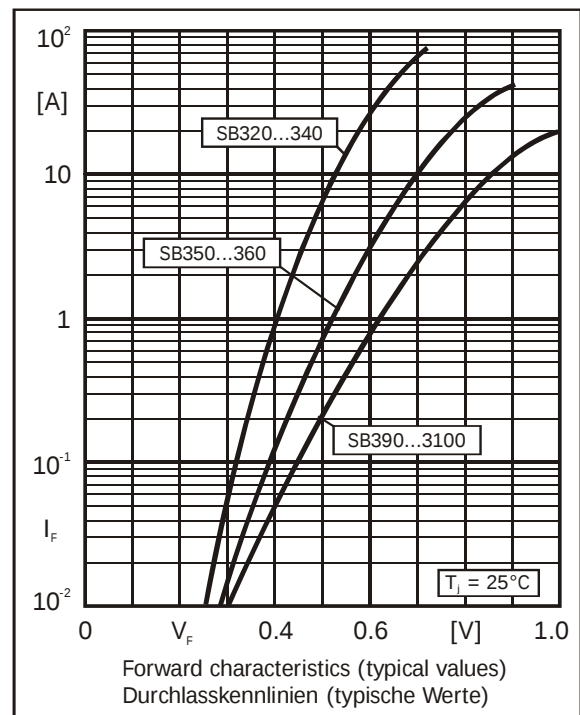
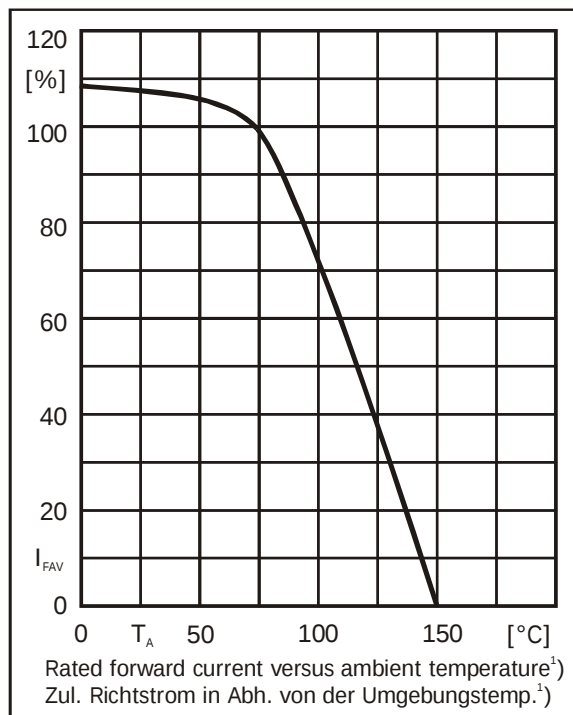
|                                                                                                 |                          |                |                              |
|-------------------------------------------------------------------------------------------------|--------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load<br>Dauergrenzstrom in Einwegschaltung mit R-Last | $T_A = 75^\circ\text{C}$ | $I_{FAV}$      | 3 A <sup>2)</sup>            |
| Repetitive peak forward current<br>Periodischer Spitzenstrom                                    | $f > 15\text{ Hz}$       | $I_{FRM}$      | 15 A <sup>2)</sup>           |
| Peak forward surge current, 50 Hz half sine-wave<br>Stoßstrom für eine 50 Hz Sinus-Halbwellen   | $T_A = 25^\circ\text{C}$ | $I_{FSM}$      | 150 A                        |
| Rating for fusing, $t < 10\text{ ms}$<br>Grenzlastintegral, $t < 10\text{ ms}$                  | $T_A = 25^\circ\text{C}$ | $i^2t$         | 110 A <sup>2</sup> s         |
| Junction temperature – Sperrschichttemperatur<br>Storage temperature – Lagerungstemperatur      |                          | $T_j$<br>$T_s$ | -50...+150°C<br>-50...+175°C |

1  $I_F = 3\text{ A}, T_j = 25^\circ\text{C}$ 
 2 Valid, if leads are kept at ambient temperature at a distance of 10 mm from case  
 Gültig, wenn die Anschlussdrähte in 10 mm Abstand vom Gehäuse auf Umgebungstemperatur gehalten werden

## Characteristics

## Kennwerte

|                                                                                             |                          |                             |                                    |                |                        |
|---------------------------------------------------------------------------------------------|--------------------------|-----------------------------|------------------------------------|----------------|------------------------|
| Leakage current<br>Sperrstrom                                                               | $T_j = 25^\circ\text{C}$ | SB320...360<br>SB390...3100 | $V_R = V_{RRM}$<br>$V_R = V_{RRM}$ | $I_R$<br>$I_R$ | < 0.5 mA<br>< 0.6 mA   |
| Thermal resistance junction to ambient air<br>Wärmewiderstand Sperrschicht – umgebende Luft |                          |                             |                                    | $R_{thA}$      | < 25 K/W <sup>1)</sup> |
| Thermal resistance junction to leads<br>Wärmewiderstand Sperrschicht – Anschlussdraht       |                          |                             |                                    | $R_{thL}$      | < 8 K/W                |



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 vom Gehäuse auf Umgebungstemperatur gehalten werden