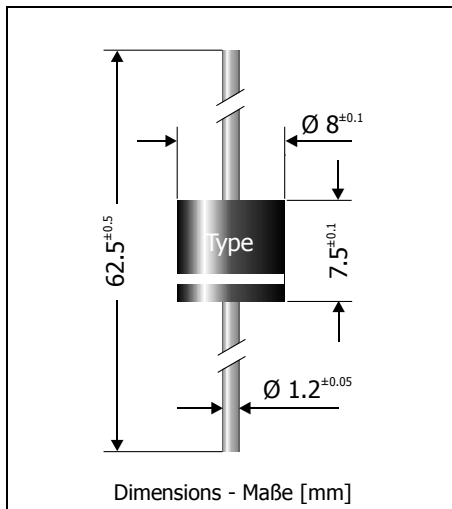


SB1520 ... SB15100

Schottky Barrier Rectifier Diodes Schottky-Barrier-Gleichrichterdiodes

Version 2008-06-24



| | |
|---|----------------|
| Nominal current Nennstrom | 15 A |
| Repetitive peak reverse voltage Periodische Spitzensperrspannung | 20...100 V |
| Plastic case Kunststoffgehäuse | Ø 8 x 7.5 [mm] |
| Weight approx. Gewicht ca. | 1.3 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****Grenzwerte**

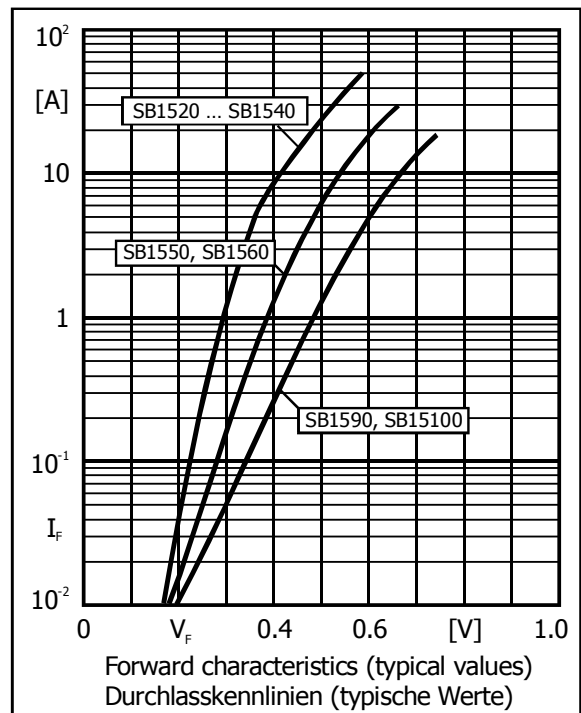
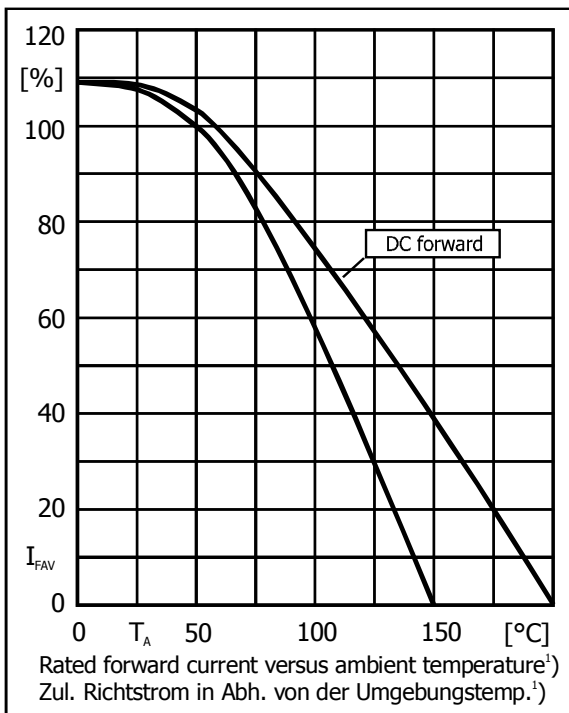
| Type Typ | Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] | Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V] | Forward voltage Durchlass-Spannung V_F [V] ¹⁾ | |
|-------------|--|---|--|--------------|
| | | | $I_F = 5$ A | $I_F = 15$ A |
| SB1520 | 20 | 20 | < 0.45 | < 0.55 |
| SB1530 | 30 | 30 | < 0.45 | < 0.55 |
| SB1540 | 40 | 40 | < 0.45 | < 0.55 |
| SB1550 | 50 | 50 | < 0.61 | < 0.68 |
| SB1560 | 60 | 60 | < 0.61 | < 0.68 |
| SB1590 | 90 | 90 | < 0.75 | < 0.83 |
| SB15100 | 100 | 100 | < 0.75 | < 0.83 |

| | | | |
|--|--------------------------|----------------|-------------------------|
| Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last | $T_A = 50^\circ\text{C}$ | I_{FAV} | 15 A ²⁾ |
| Repetitive peak forward current Periodischer Spitzenstrom | $f > 15$ Hz | I_{FRM} | 60 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} | 300/340 A |
| Rating for fusing – Grenzlastintegral, $t < 10$ ms | $T_A = 25^\circ\text{C}$ | i^2t | 450 A ² s |
| Junction temperature – Sperrschichttemperatur in DC forward mode – bei Gleichstrom-Durchlassbetrieb | | T_j T_j | -50...+150°C ≤ 200°C |
| Storage temperature – Lagerungstemperatur | | T_s | -50...+175°C |

1 $T_j = 25^\circ\text{C}$ 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 Sperrstrom | $T_j = 25^\circ\text{C}$ $V_R = V_{RRM}$ $T_j = 100^\circ\text{C}$ $V_R = V_{RRM}$ | I_R I_R | < 500 μA < 25 mA |
| Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft | | R_{thA} | < 12 K/W ¹⁾ |
| Thermal resistance junction to leads Wärmewiderstand Sperrschicht – Anschlussdraht | | R_{thL} | < 2.5 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