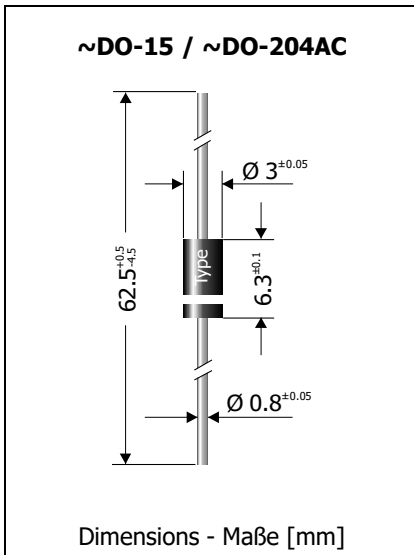


| | | |
|--|--|---|
| SB220 ... SB2100 Schottky Barrier Rectifier Diodes Schottky-Barrier-Gleichrichterdioden | $I_{FAV} = 2 \text{ A}$ $V_{F1} < 0.50 \text{ V}$ $T_{jmax} = 150^\circ\text{C}$ | $V_{RRM} = 20...100 \text{ V}$ $I_{FSM} = 50/55 \text{ A}$ |
|--|--|---|

Version 2016-09-29



Typical Applications

Output Rectification in DC/DC Converters, Polarity Protection, Free-wheeling diodes, Commercial grade ¹⁾

Features

Low forward voltage drop, Compliant to RoHS, REACH, Conflict Minerals ¹⁾

Mechanical Data ¹⁾

Taped in ammo pack 4000
 Weight approx. 0.4 g
 Case material UL 94V-0
 Solder & assembly conditions 260°C/10s
 MSL N/A

Typische Anwendungen

Ausgangsgleichrichtung in Gleichstromwandlern, Verpolschutz, Freilaufdioden, Standardausführung ¹⁾

Besonderheiten

Niedrige Fluss-Spannung, Konform zu RoHS, REACH, Konfliktmineralien ¹⁾

Mechanische Daten ¹⁾

Gegurtet in Ammo-Pack, Gewicht ca. Gehäusematerial, Löt- und Einbaubedingungen

Maximum ratings ²⁾

Grenzwerte ²⁾

| Type Typ | Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V] | Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V] |
|-------------|--|---|
| SB220 | 20 | 20 |
| SB230 | 30 | 30 |
| SB240 | 40 | 40 |
| SB250 | 50 | 50 |
| SB260 | 60 | 60 |
| SB290 | 90 | 90 |
| SB2100 | 100 | 100 |

| | | | |
|---|------------------------------------|----------------|------------------------------|
| Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last | $T_A = 75^\circ\text{C}$ | I_{FAV} | 2 A ³⁾ |
| Repetitive peak forward current – Periodischer Spitzenstrom | $f > 15 \text{ Hz}$ | I_{FRM} | 12 A ³⁾ |
| Peak forward surge current, (half sine) – Stoßstrom (Sinus-Halbw.) | 50/60 Hz, $T_A = 25^\circ\text{C}$ | I_{FSM} | 50/55 A |
| Rating for fusing, $t < 10 \text{ ms}$ – Grenzlastintegral, $t < 10 \text{ ms}$ | $T_A = 25^\circ\text{C}$ | i^2t | 12.5 A ² s |
| Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur | | T_j T_S | -50...+150°C -50...+175°C |

Characteristics

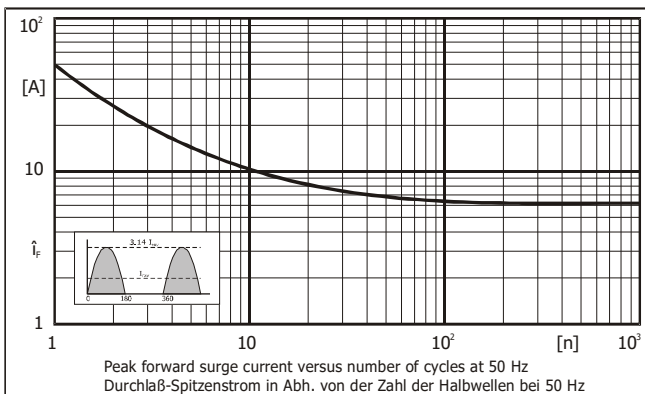
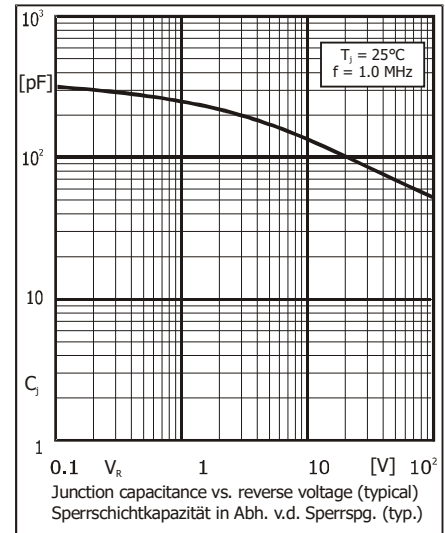
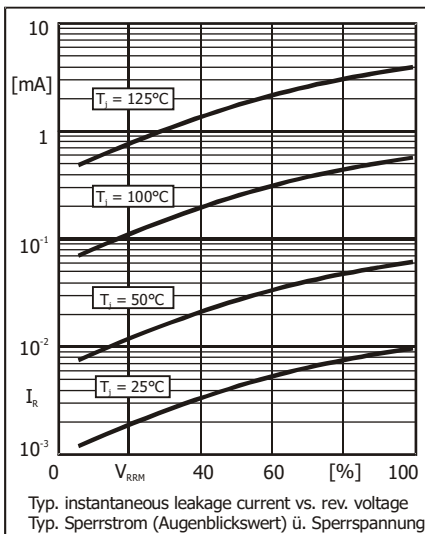
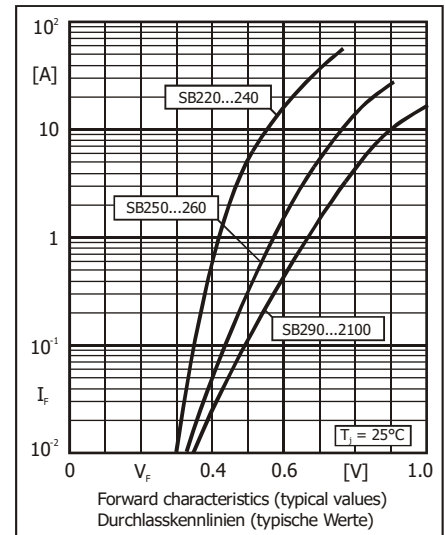
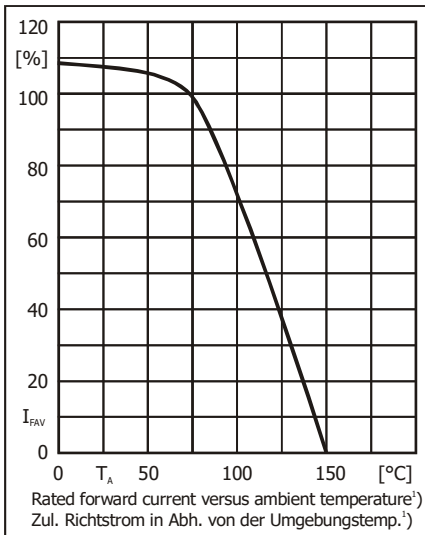
Kennwerte

| | | | | |
|---|---|------------------------------------|------------------------|------------------------------------|
| Leakage current Sperrstrom | $T_j = 25^\circ\text{C}$ $T_j = 100^\circ\text{C}$ | $V_R = V_{RRM}$ $V_R = V_{RRM}$ | I_R I_R | < 0.5 mA < 5 mA |
| Thermal resistance junction to ambient – Wärmewiderstand Sperrschicht – Umgebung Thermal resistance junction to lead – Wärmewiderstand Sperrschicht – Anschlussdraht | | | R_{thA} R_{thL} | < 45 K/W ³⁾ < 15 K/W |

1 Please note the [detailed information on our website](#) or at the beginning of the data book
 Bitte beachten Sie die [detaillierten Hinweise auf unserer Internetseite](#) bzw. am Anfang des Datenbuches
 2 $T_A = 25^\circ\text{C}$ unless otherwise specified – $T_A = 25^\circ\text{C}$ wenn nicht anders angegeben
 3 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

| Type Typ | Forward voltage Durchlass-Spannung | | | Junction capacitance Sperrschichtkapazität | |
|------------------|---------------------------------------|-------------|---------|---|-------------|
| | V_F [V] | @ I_F [A] | @ T_j | C_j [pF] | @ V_R [V] |
| SB120 ... SB140 | < 0.50 | 2.0 | 25°C | typ. 80 | 4 |
| SB150 ... SB160 | < 0.70 | 2.0 | 25°C | typ. 80 | 4 |
| SB190 ... SB1100 | < 0.79 | 2.0 | 25°C | typ. 80 | 4 |



Disclaimer: See data book page 2 or [website](#)
Haftungsausschluss: Siehe Datenbuch Seite 2 oder [Internet](#)