



Inline bridge

| Type | Alternating Input voltage V_{VRMS} V | Repetitive peak reverse voltage V_{RRM} V | Max. admissible load capacitor C_L μF | Min. required protective resistor R_t Ω |
|-----------------|--|--|---|---|
| B40 C5000-3000 | 40 | 80 | 10000 | 0,5 |
| B80 C5000-3000 | 80 | 160 | 5000 | 1 |
| B125 C5000-3000 | 125 | 250 | 2500 | 2 |
| B250 C5000-3000 | 250 | 600 | 1500 | 4 |
| B380 C5000-3000 | 380 | 800 | 1000 | 5 |
| B500 C5000-3000 | 500 | 1000 | 800 | 6,5 |

Silicon-Bridge Rectifiers

B ...C5000-3000

Forward Current: 5 / 3 A

Reverse Voltage: 80 to 1000 V

Publish Data

Features

- max. solder temperature 260°C, max. 5s
- UL recognized, file no. E63532
- Standard packaging : bulk

Mechanical Data

- Plastic case 32 * 5,6 * 17 [mm]
- Weight approx. 7g
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position : any
- Marking : Type number

| Absolute Maximum Ratings | | $T_c = 25^\circ C$ unless otherwise specified | |
|--------------------------|--|---|------------------|
| Symbol | Conditions | Values | Units |
| I^2t | Rating for fusing, $t < 10$ ms | 110 | A ² s |
| I_{FRM} | Repetitive peak forward current > 15 Hz | 30 | A |
| I_{FSM} | Peak forward surge current, 50 Hz half sine-wave | 150 | A |
| t_{rr} | Reverse recovery time ($I_F = A$) | / | ns |
| I_{FAV} | Max. averaged fwd. current, R-load, $T_A = 50^\circ C$ ¹⁾ | 3,5 | A |
| I_{FAV} | Max. averaged fwd. current, C-load, $T_A = 50^\circ C$ ¹⁾ | 3 | A |
| I_{FAV} | Max. current with cooling fin, R-load, $T_c = 100^\circ C$ ²⁾ | 5,8 | A |
| I_{FAV} | Max. current with cooling fin, C-load, $T_c = 100^\circ C$ ²⁾ | 5,0 | A |
| R_{thA} | Thermal resistance junction to ambient ¹⁾ | 20 | K/W |
| R_{thC} | Thermal resistance junction to case ¹⁾ | | K/W |
| T_j | Operating junction temperature | - 50 ... + 150 | °C |
| T_s | Storage temperature | - 50 ... + 150 | °C |

| Characteristics | | $T_c = 25^\circ C$ unless otherwise specified | |
|-----------------|---|---|---------|
| Symbol | Conditions | Values | Units |
| V_F | Maximum forward. voltage, $T_j = 25^\circ C$, $I_F = 5$ A | 1,1 | V |
| I_R | Maximum leakage current, $T_j = 25^\circ C$, $V_R = V_{RRM}$ | 10 | μA |
| C_j | Typical junction capacitance per leg at V, MHz | | pF |



