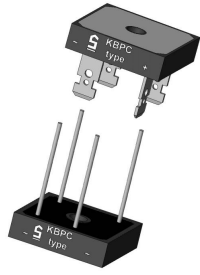


# KBPC 2500FW ... KBPC 2516FW



## Square bridge

## Silicon-Bridge Rectifiers

### KBPC 2500F/W ... KBPC 2516F/W

**Forward Current: 25 A**

**Reverse Voltage: 50 to 1600 V**

Publish Data

### Features

- max. solder temperature 260°C, max. 5s
- UL recognized, file no.E63532
- Standard packaging: bulk
- $V_{ISO} > 2500$  V

### Mechanical Data

- Plastic case with alu-bottom 28,6 \* 28,6 \* 7,3 [mm]
- Weight approx. 18 g
- Terminals: plated terminals solderable per IEC 68-2-20
- Mounting position: any
- Admissible torque for mounting (M 5): 2 (± 10 %) Nm
- W - wire
- F - faston

| Type          | Alternating input voltage<br>$V_{RMS}$<br>V | Repetitive peak reverse voltage<br>$V_{RRM}$<br>V |
|---------------|---|---|
| KBPC 2500 F/W | 35  | 50  |
| KBPC 2501 F/W | 70  | 100   |
| KBPC 2502 F/W | 140   | 200   |
| KBPC 2504 F/W | 280   | 400   |
| KBPC 2506 F/W | 420   | 600   |
| KBPC 2508 F/W | 560   | 800   |
| KBPC 2510 F/W | 700   | 1000  |
| KBPC 2512 F/W | 800   | 1200  |
| KBPC 2514 F/W | 900   | 1400  |
| KBPC 2516 F/W | 1000  | 1600  |

| Absolute Maximum Ratings |  | $T_c = 25^\circ\text{C}$ unless otherwise specified |                  |
|--------------------------|--|---|------------------|
| Symbol                   | Conditions   | Values  | Units            |
| $I_{FRM}$                | Repetitive peak forward current; $f > 15\text{ Hz}^1$                        | 60  | A                |
| $I^2t$                   | Rating for fusing, $t < 10\text{ ms}$  | 375   | A <sup>2</sup> s |
| $I_{FSM}$                | Peak forward surge current, 50 Hz half sine-wave<br>$T_A = 25^\circ\text{C}$ | 300   | A                |
| $I_{FAV}$                | Max. averaged fwd. current, R-load, $T_A = 50^\circ\text{C}^1$               | not applicable                                      | A                |
| $I_{FAV}$                | Max. averaged fwd. current, C-load, $T_A = 50^\circ\text{C}^1$               | not applicable                                      | A                |
| $I_{FAV}$                | Max. current with cooling fin, R-load, $T_c = 100^\circ\text{C}^2$           | 25  | A                |
| $I_{FAV}$                | Max. current with cooling fin, C-load, $T_c = 100^\circ\text{C}^2$           | 20  | A                |
| $R_{thA}$                | Thermal resistance junction to ambient <sup>1)</sup>                         |   | K/W              |
| $R_{thC}$                | Thermal resistance junction to case <sup>1)</sup>                            | 2   | K/W              |
| $T_j$                    | Operating junction temperature   | - 50 ... + 150                                      | °C               |
| $T_s$                    | Storage temperature  | - 50 ... + 150                                      | °C               |

| Characteristics |   | $T_c = 25^\circ\text{C}$ unless otherwise specified |               |
|-----------------|---|---|---------------|
| Symbol          | Conditions  | Values  | Units         |
| $V_F$           | Maximum forward. voltage,<br>$T_j = 25^\circ\text{C}$ ; $I_F = 12,5\text{ A}$ | 1,2   | V             |
| $I_R$           | Maximum Leakage current,<br>$T_j = 25^\circ\text{C}$ ; $V_R = V_{RRM}$        | 25  | $\mu\text{A}$ |
| $C_j$           | Typical junction capacitance per leg at V, MHz                                |   | pF            |

