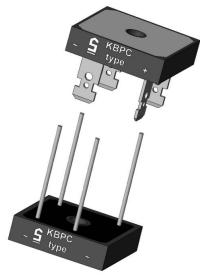


KBPC 1000FW ... KBPC 1016FW



Square bridge

Silicon-Bridge Rectifiers

KBPC 1000F/W ... KBPC 1016F/W

Forward Current: 10 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
- $V_{ISO} > 2500 \text{ V}$

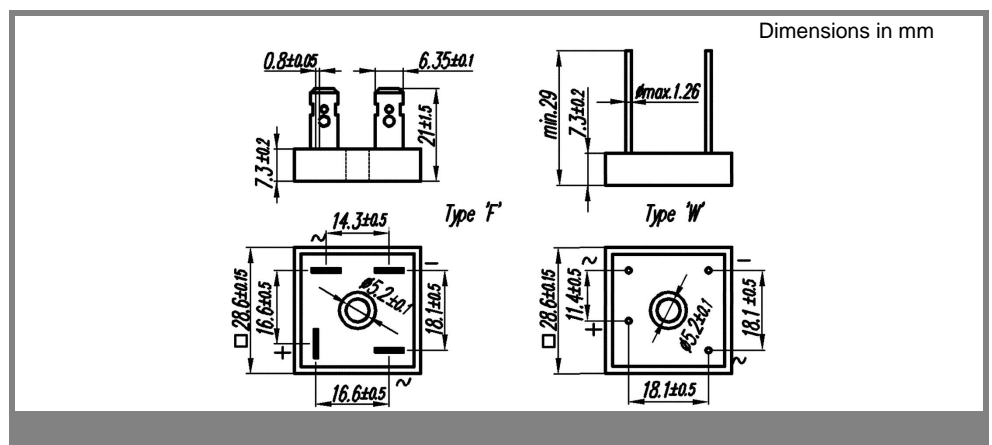
Mechanical Data

- 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 ($\pm 10 \%$) Nm
- W - wire
- F - faston

| Type | Alternating input voltage V_{RMS} V | Repetitive peak reverse voltage V_{RRM} V |
|---------------|---|---|
| KBPC 1000 F/W | 35 | 50 |
| KBPC 1001 F/W | 70 | 100 |
| KBPC 1002 F/W | 140 | 200 |
| KBPC 1004 F/W | 280 | 400 |
| KBPC 1006 F/W | 420 | 600 |
| KBPC 1008 F/W | 560 | 800 |
| KBPC 1010 F/W | 700 | 1000 |
| KBPC 1012 F/W | 800 | 1200 |
| KBPC 1014 F/W | 900 | 1400 |
| KBPC 1016 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; $f > 15 \text{ Hz}^1$ | 50 | A |
| I^2t | Rating for fusing, $t < 10 \text{ ms}$ | 166 | A ² s |
| I_{FSM} | Peak forward surge current, 50 Hz half sine-wave $T_A = 25^\circ\text{C}$ | 200 | 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, $T_c = 100^\circ\text{C}^2$ | 10 | A |
| I_{FAV} | Max. current with cooling fin, C-load, $T_c = 100^\circ\text{C}^2$ | 8 | A |
| R_{thA} | Thermal resistance junction to ambient ¹⁾ | | K/W |
| R_{thC} | Thermal resistance junction to case ¹⁾ | 3 | 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, $T_j = 25^\circ\text{C}$; $I_F = 5 \text{ A}$ | 1,2 | V |
| I_R | Maximum Leakage current, $T_j = 25^\circ\text{C}$; $V_R = V_{RRM}$ | 25 | μA |
| C_j | Typical junction capacitance per leg at V, MHz | | pF |



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