

KBPC 1500FW ... KBPC1516FW



Square bridge

Silicon-Bridge Rectifiers

KBPC 1500F/W ... KBPC1516F/W

Forward Current: 15 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

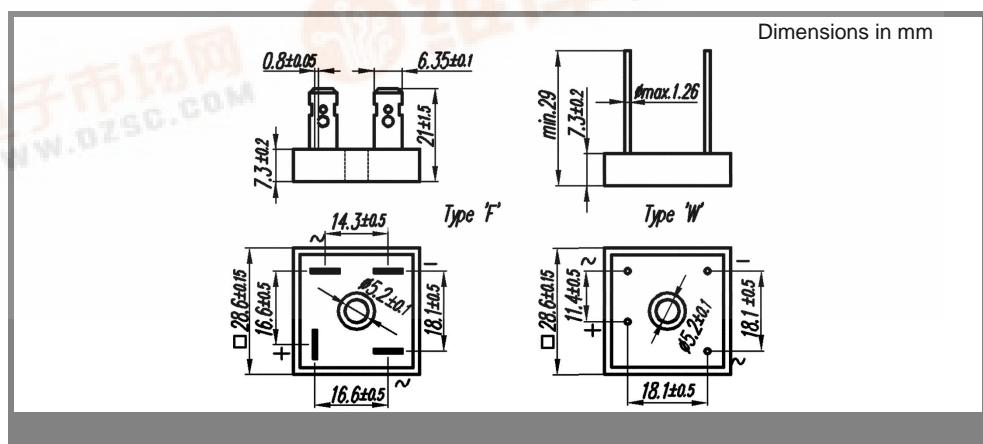
Mechanical Data

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

Type	Alternating input voltage V RMS V	Repetitive peak reverse voltage V_{RRM} V
KBPC 1500 F/W	35	50
KBPC 1501 F/W	70	100
KBPC 1502 F/W	140	200
KBPC 1504 F/W	280	400
KBPC 1506 F/W	420	600
KBPC 1508 F/W	560	800
KBPC 1510 F/W	700	1000
KBPC 1512 F/W	800	1200
KBPC 1514 F/W	900	1400
KBPC 1516 F/W	1000	1600

Absolute Maximum Ratings		$T_c = 25^\circ C$ unless otherwise specified	
Symbol	Conditions	Values	Units
I_{FRM}	Repetitive peak forward current; $f > 15$ Hz ¹⁾	50	A
I^2t	Rating for fusing, $t < 10$ ms	166	A ² s
I_{FSM}	Peak forward surge current, 50 Hz half sine-wave $T_A = 25^\circ C$	200	A
I_{FAV}	Max. averaged fwd. current, R-load, $T_A = 50^\circ C$ ¹⁾	not applicable	A
I_{FAV}	Max. averaged fwd. current, C-load, $T_A = 50^\circ C$ ¹⁾	not applicable	A
I_{FAV}	Max. current with cooling fin, R-load, $T_C = 100^\circ C$ ²⁾	15	A
I_{FAV}	Max. current with cooling fin, C-load, $T_C = 100^\circ C$ ²⁾	12	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		$T_c = 25^\circ C$ unless otherwise specified	
Symbol	Conditions	Values	Units
V_F	Maximum forward. voltage, $T_j = 25^\circ C$; $I_F = 7,5$ A	1,2	V
I_R	Maximum Leakage current, $T_j = 25^\circ C$; $V_R = V_{RRM}$	25	µA
C_J	Typical junction capacitance per leg at V , MHz		pF



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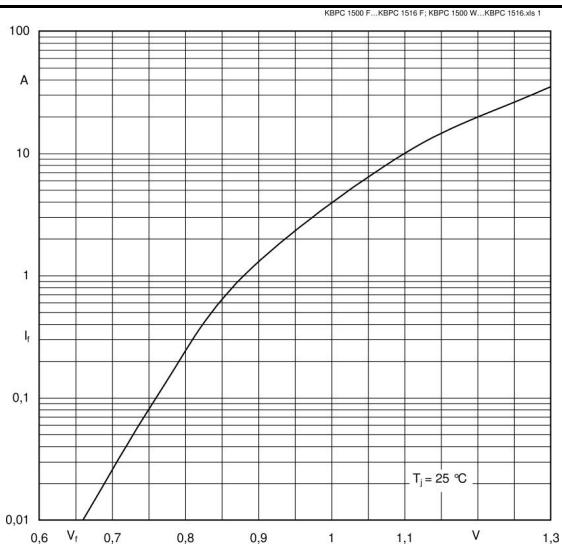


Fig. 1 : Forward characteristics (typical values)

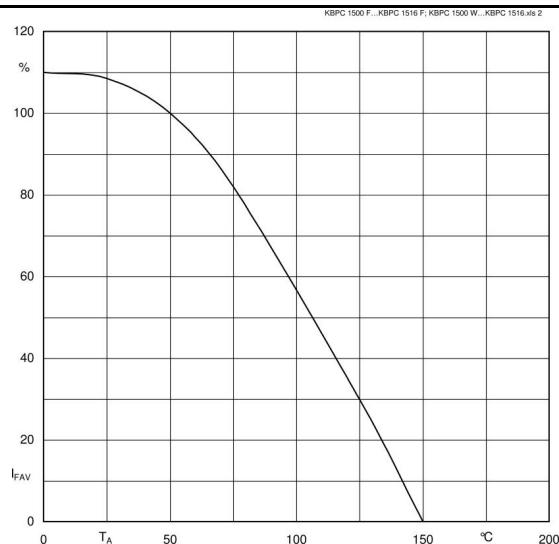


Fig. 2 : Rated forward current vs. ambient temperature