

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
- $V_{ISO} > 2500 \text{ V}$

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 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 ² s
I_{FSM}	Peak forward surge current, 50 Hz half sine-wave $T_A = 25^\circ\text{C}$	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 $^{1)}$		K/W
R_{thC}	Thermal resistance junction to case $^{1)}$	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, $T_j = 25^\circ\text{C}$; $I_F = 12,5 \text{ A}$	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



