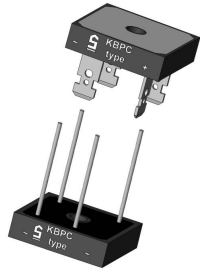


# KBPC 2500FW ... KBPC 2516FW



## 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 <sup>2</sup> 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 <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, $T_j = 25^\circ\text{C}$ ; $I_F = 12,5 \text{ A}$	1,2	V
$I_R$	Maximum Leakage current, $T_j = 25^\circ\text{C}$ ; $V_R = V_{RRM}$	25	$\mu\text{A}$
$C_j$	Typical junction capacitance per leg at V, MHz		pF

