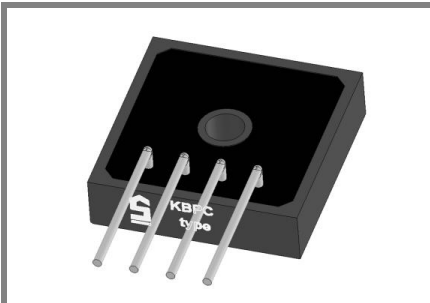


# KBPC 2500I ... KBPC 2510 ...



**Square bridge**

## Silicon-Bridge Rectifiers

### KBPC 2500I ... KBPC 2510I

**Forward Current: 25 A**

**Reverse Voltage: 50 to 1000 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 (± 10 %) Nm

Type	Alternating input voltage $V_{RMS}$ V	Repetitive peak reverse voltage $V_{RRM}$ V
KBPC 2500I	35	50
KBPC 2501I	70	100
KBPC 2502I	140	200
KBPC 2504I	280	400
KBPC 2506I	420	600
KBPC 2508I	560	800
KBPC 2510I	700	1000

### 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	µA
$C_j$	Typical junction capacitance per leg at V, MHz		pF

