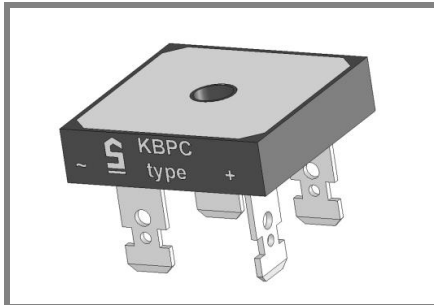


KBPC 5000F ... KBPC 5012F



Square bridge

Type	Alternating input voltage V_{RMS} V	Repetitive peak reverse voltage V_{RRM} V
KBPC 5000 F	35	50
KBPC 5001 F	70	100
KBPC 5002 F	140	200
KBPC 5004 F	280	400
KBPC 5006 F	420	600
KBPC 5008 F	560	800
KBPC 5010 F	700	1000
KBPC 5012 F	800	1200

Silicon-Bridge Rectifiers

KBPC 5000F ... KBPC 5012F

Forward Current: 50 A

Reverse Voltage: 50 to 1200 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 (± 10 %) N
- F - faston only

Absolute Maximum Ratings $T_c = 25^\circ\text{C}$ unless otherwise specified

Symbol	Conditions	Values	Units
I_{FRM}	Repetitive peak forward current; $f > 15$ Hz ¹⁾	90	A
I^2t	Rating for fusing, $t < 10$ ms	800	A ² s
I_{FSM}	Peak forward surge current, 50 Hz half sine-wave $T_A = 25^\circ\text{C}$	450	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⁾	50	A
I_{FAV}	Max. current with cooling fin, C-load, $T_c = 100^\circ\text{C}$ ²⁾	46	A
R_{thA}	Thermal resistance junction to ambient ¹⁾		K/W
R_{thC}	Thermal resistance junction to case ¹⁾	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, $T_j = 25^\circ\text{C}$; $I_F = 25$ A	1,1	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

