

## Silicon Bridge Rectifier

$V_{RRM} = 50 \text{ V - } 1000 \text{ V}$

$I_F = 25 \text{ A}$

### Features

- High efficiency
- Types up to 1000 V  $V_{RRM}$
- Silicon junction
- Metal case

**KBPC-T/W Package**

### Mechanical Data

Case: Mounted in the bridge encapsulation



Mounting position: Hole for #10 screw

Polarity: Marked on case

**Maximum ratings, at  $T_j = 25^\circ\text{C}$ , unless otherwise specified (KBPCXXXXT uses KBPC-T package while KBPCXXXXW uses KBPC-W package)**

Parameter	Symbol	Conditions	KBPC2506T/W	KBPC2508T/W	KBPC2510T/W	Unit
Repetitive peak reverse voltage	$V_{RRM}$		600	800	1000	V
RMS reverse voltage	$V_{RMS}$		420	560	700	V
DC blocking voltage	$V_{DC}$		600	800	1000	V
Continuous forward current	$I_F$	$T_C \leq 55^\circ\text{C}$	25	25	25	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25^\circ\text{C}, t_p = 8.3 \text{ ms}$	350	350	350	A
Operating temperature	$T_j$		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

**Electrical characteristics, at  $T_j = 25^\circ\text{C}$ , unless otherwise specified**

Parameter	Symbol	Conditions	KBPC2506T/W	KBPC2508T/W	KBPC2510T/W	Unit
Diode forward voltage	$V_F$	$I_F = 12.5 \text{ A}, T_j = 25^\circ\text{C}$	1.1	1.1	1.1	V
Reverse current	$I_R$	$V_R = 50 \text{ V}, T_j = 25^\circ\text{C}$ $V_R = 50 \text{ V}, T_j = 100^\circ\text{C}$	5 500	5 500	5 500	$\mu\text{A}$

### Thermal characteristics

Thermal resistance, junction - case	$R_{thJC}$	1.9	1.9	1.9	$^\circ\text{C/W}$
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