



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## Single Phase Silicon Bridge Rectifier

$V_{RRM} = 600\text{ V} - 1000\text{ V}$

$I_O = 50\text{ A}$

### Features

- High efficiency
- Silicon junction
- Metal case
- Types from 600 V to 1000 V  $V_{RRM}$
- Not ESD Sensitive

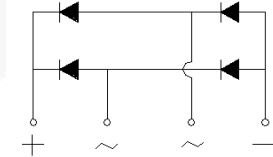
### Mechanical Data

Case: Mounted in the bridge encapsulation

Mounting: Hole for #10 screw

Polarity: Marked on case

KBPC-T/W Package



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

Parameter	Symbol	Conditions	KBPC5006T/W	KBPC5008T/W	KBPC5010T/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
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 $T_c = 25\text{ }^\circ\text{C}$ , unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load

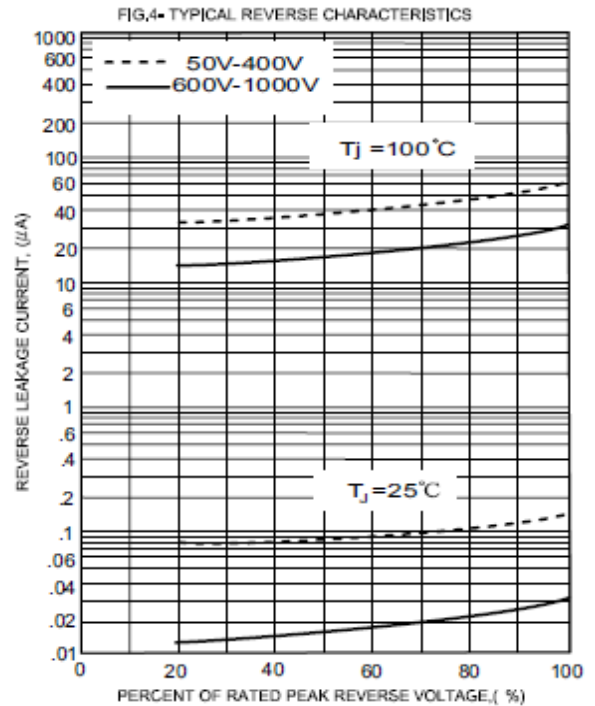
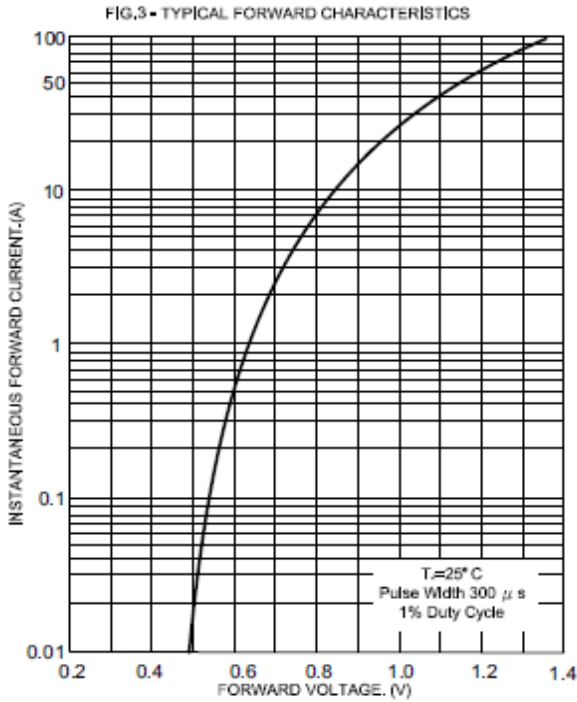
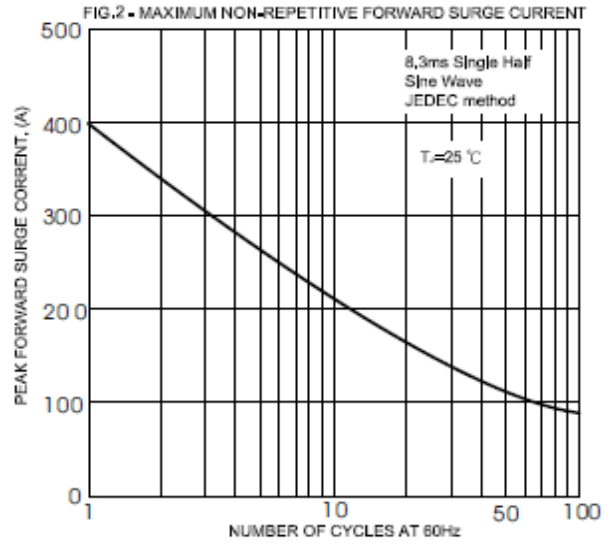
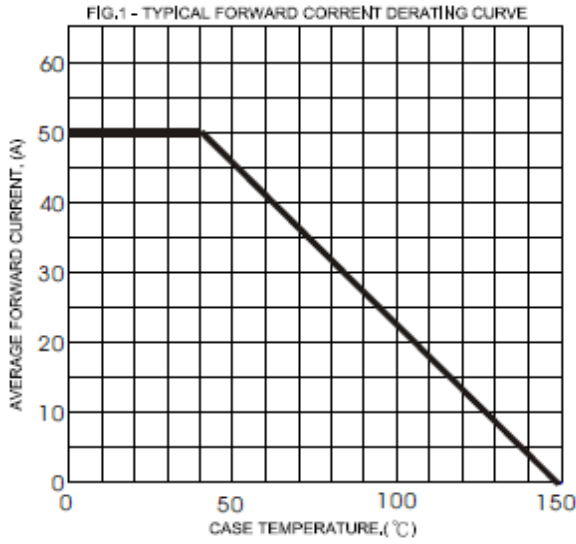
For capacitive load derate current by 20%

Parameter	Symbol	Conditions	KBPC5006T/W	KBPC5008T/W	KBPC5010T/W	Unit
Maximum average forward rectified current	$I_O$	$T_c = 40\text{ }^\circ\text{C}$	50	50	50	A
Peak forward surge current	$I_{FSM}$	8.3 ms half sine-wave	400	400	400	A
Maximum instantaneous forward voltage per leg	$V_F$	$I_F = 25.0\text{ A}$	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage per leg	$I_R$	$T_c = 25\text{ }^\circ\text{C}$ $T_c = 100\text{ }^\circ\text{C}$	5 500	5 500	5 500	$\mu\text{A}$

### Thermal characteristics

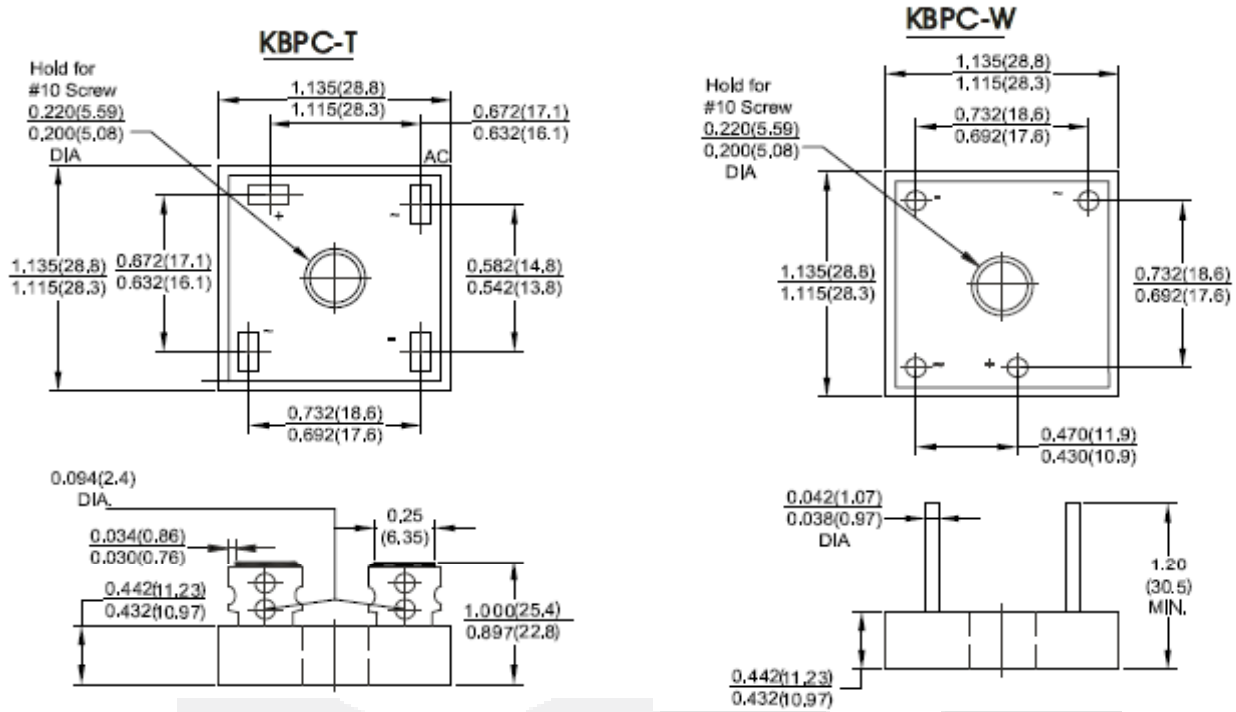
Typical thermal resistance per leg <sup>1</sup>	$R_{\theta JC}$		2.5	2.5	2.5	$^\circ\text{C/W}$
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<sup>1</sup> - Thermal resistance from Junction to Ambient on P.C. board mounting



## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



Dimensions in inches and (millimeters)

