

SINGLE PHASE SILICON BRIDGE RECTIFIER

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

FEATURES:

- High efficiency
- Silicon junction
- Al case
- Rating to 1000 V PRV

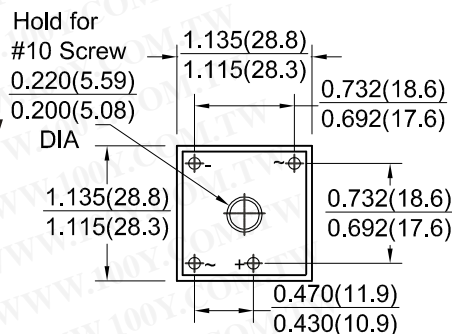
MECHANICAL DATA

Case : Mounted In the bridge encapsulation

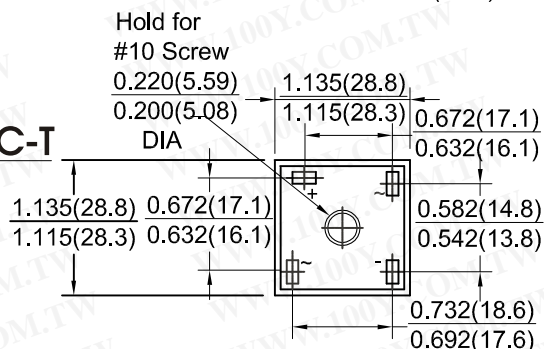
Polarity : As marked on case

Mounting : Hole for #10 screw

KBPC-W



KBPC-T



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Characteristic	Symbol	KBPC							Units
		50005 T/W	5001 T/W	5002 T/W	5004 T/W	5006 T/W	5008 T/W	5010 T/W	
	Marking	KBPC 50005	KBPC 5001	KBPC 5002	KBPC 5004	KBPC 5006	KBPC 5008	KBPC 5010	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_c=40^\circ\text{C}$	I_o	50							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) Per leg	I_{FSM}	400							Amps
Maximum instantaneous forward voltage Per leg $I_F=25.0A$	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage Per leg $T_c=25^\circ\text{C}$ $T_c=100^\circ\text{C}$	I_R	10 500							μA
Typical thermal resistance Per leg(NOTE1)	R_{th-JA}	2.5							$^\circ\text{C/W}$
Operating junction and Storage temperature range	T_J, T_{Stg}	-55to +150							$^\circ\text{C}$

NOTES:

(1) Thermal resistance from Junction to Ambient on P.C. board mounting

RATINGS AND CHARACTERISTIC CURVES KBPC50005T/W THRU KBPC5010T/W

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

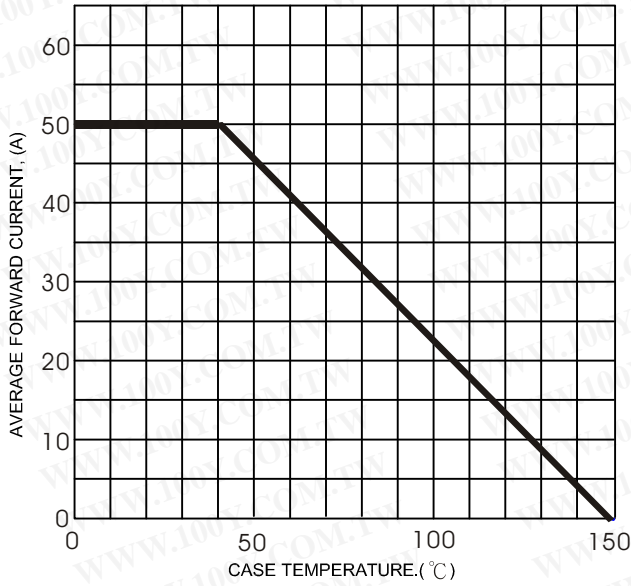
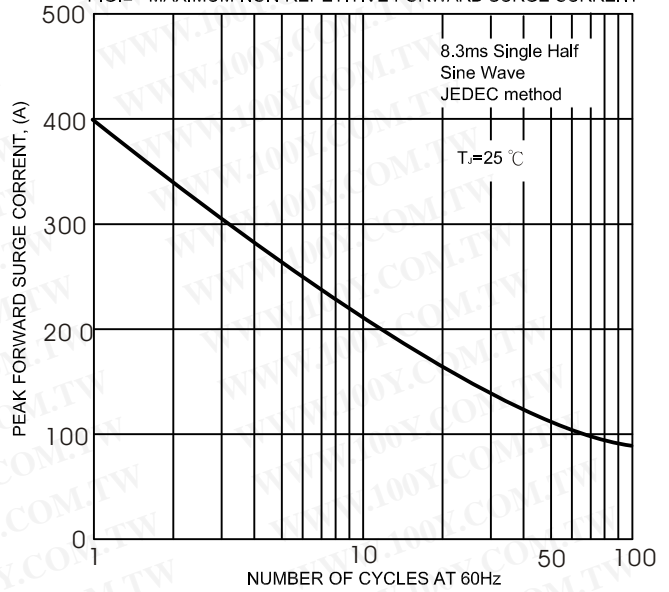


FIG.2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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FIG.3 - TYPICAL FORWARD CHARACTERISTICS

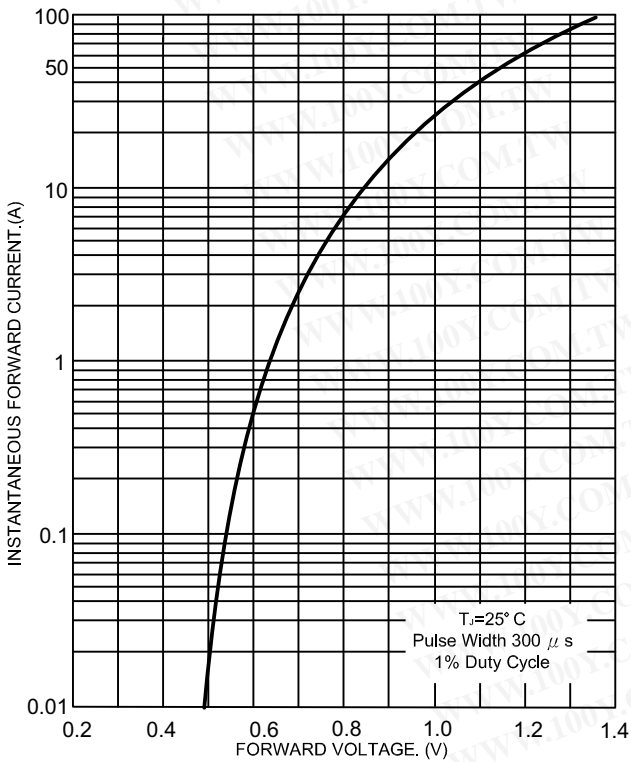
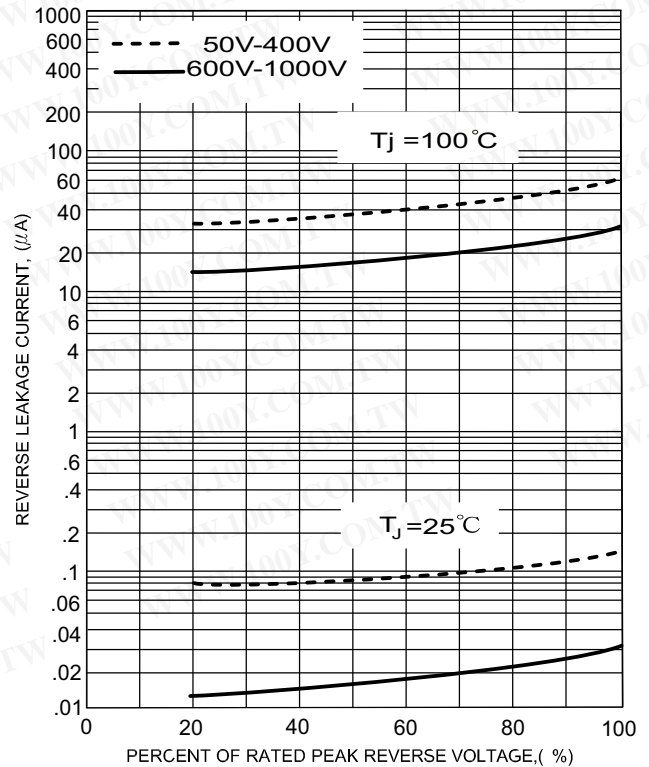


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



RATINGS AND CHARACTERISTIC CURVES KBPC50005T/W THRU KBPC5010T/W

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