

## SINGLE PHASE SILICON BRIDGE RECTIFIER

## FEATURES:

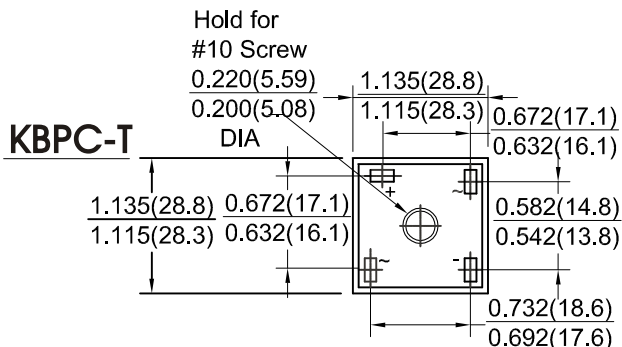
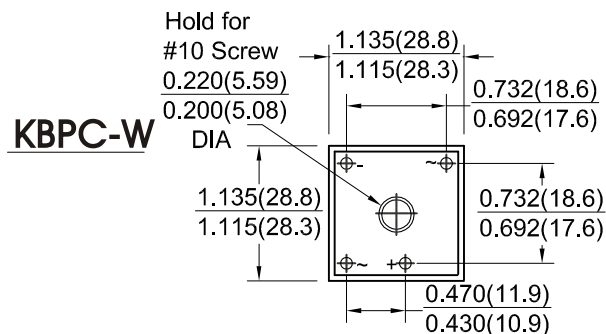
- High efficiency
- Silicon junction
- Metal case
- Rating to 1000 V PRV

## MECHANICAL DATA

Case : Mounted In the bridge encapsulation

Polarity : As marked on case

Mounting : Hole for #10 screw



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 $T_c=25^\circ\text{C}$ $T_c=100^\circ\text{C}$	$I_R$	5.0 500							$\mu A$
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 CORRENT DERATING CURVE

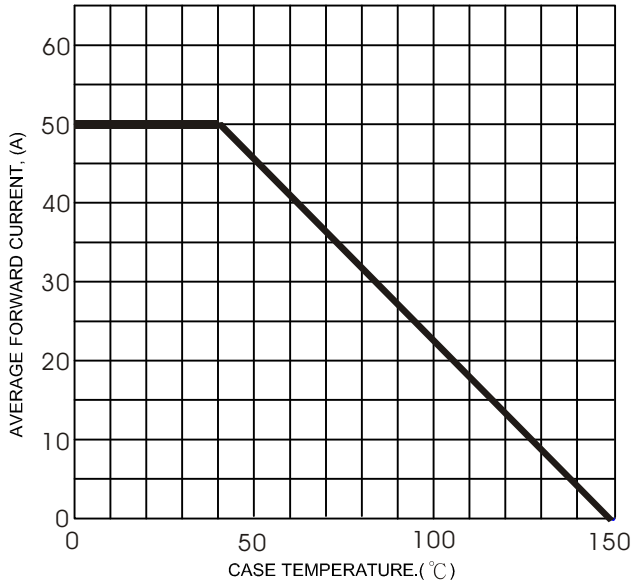


FIG.2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

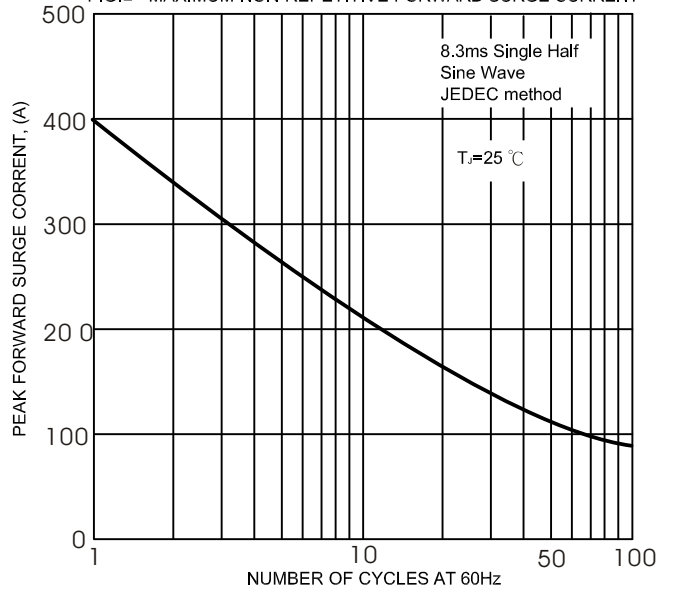


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

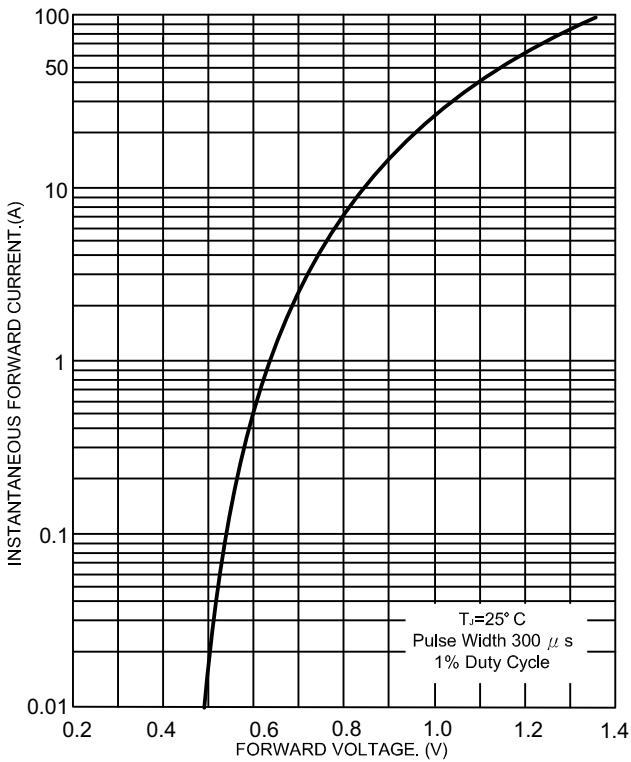


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

