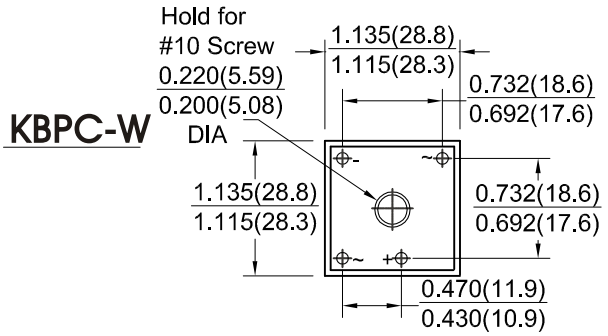
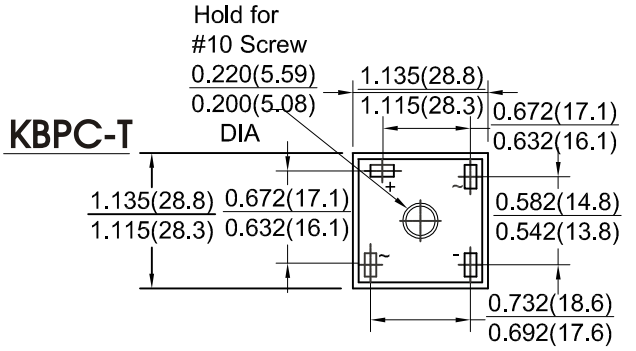
KBPC10005T/W THRU KBPC1010T/W

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
		10005 T/W	1001 T/W	1002 T/W	1004 T/W	1006 T/W	1008 T/W	1010 T/W	
	Marking	KBPC 10005	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	
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 Tc=55℃	I_O	10							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)Per leg	I_{FSM}	200							Amps
Maximum instantaneous forward voltage Per leg IF=5.0A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage Per leg Tc=25℃ / Tc=100℃	I_R	10 500							μA
Typical thermal resistance (NOTE1)	R_{th}-JC	2.3							℃/W
Typical junction capacitance(NOTE2)	C_J	300							PF
Operating junction and Storage temperature range	T_J, T_{Stg}	-55to+150							℃

NOTES:
(1) Device mounted on 300mm x 300mm x 1.6mm cu Plate Heaksink
(2) Measured at 1MHZ and applied reverse voltage of 4.0V D.C.

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

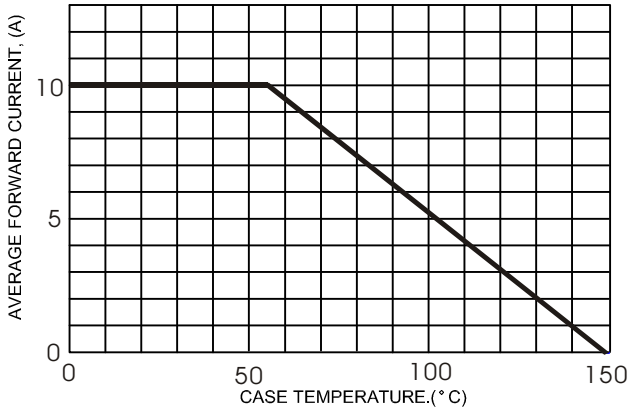


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

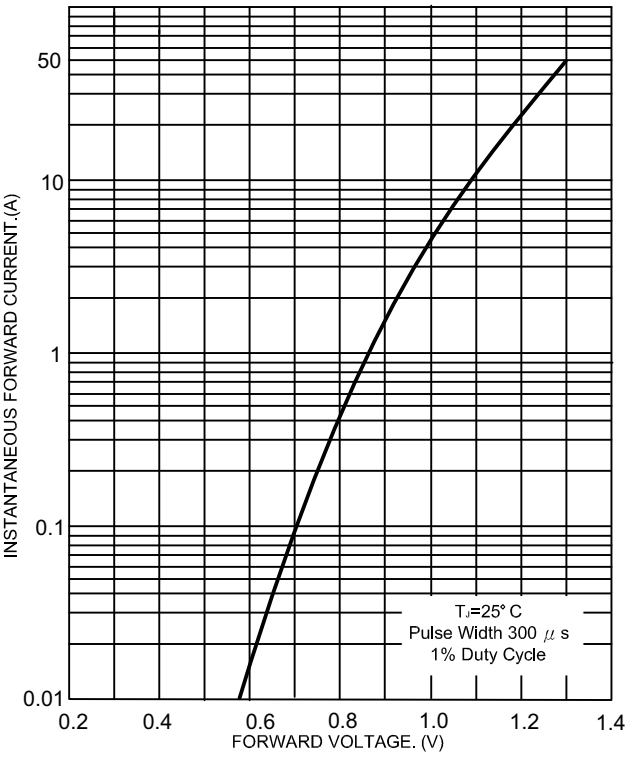


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

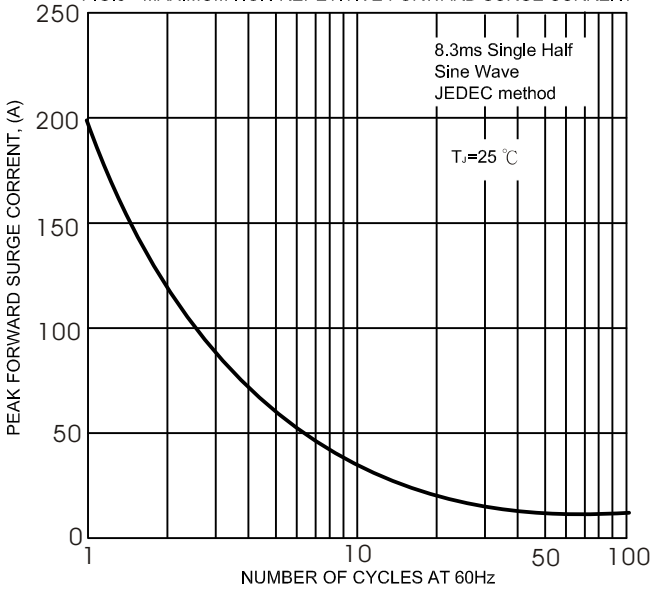


FIG.5- TYPICAL REVERSE CHARACTERISTICS

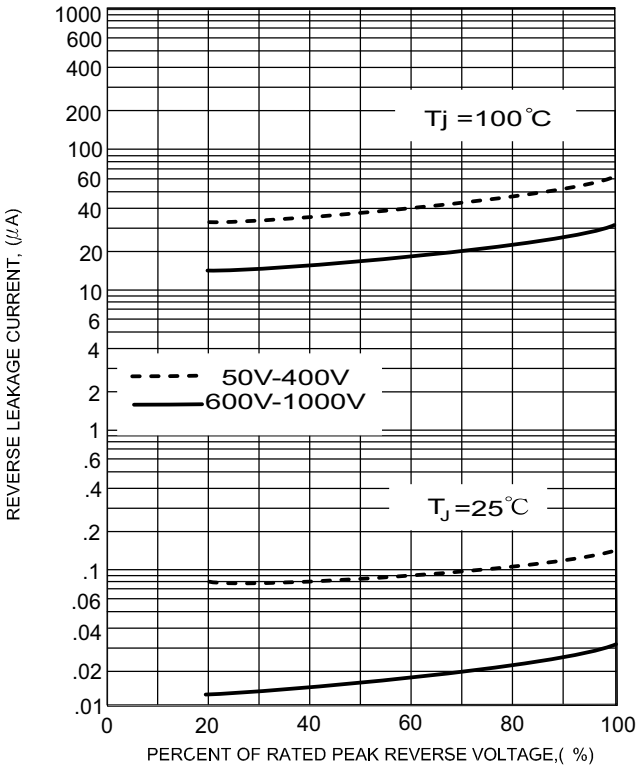
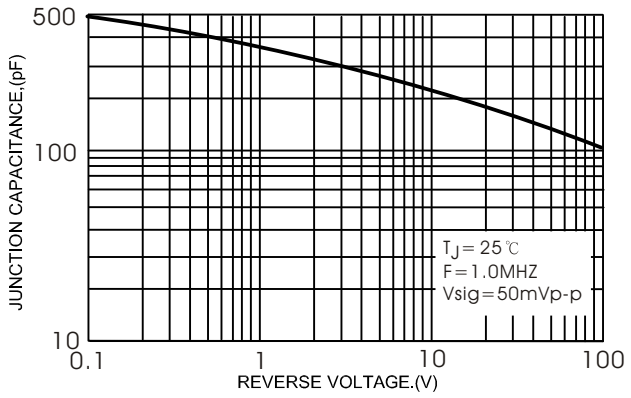
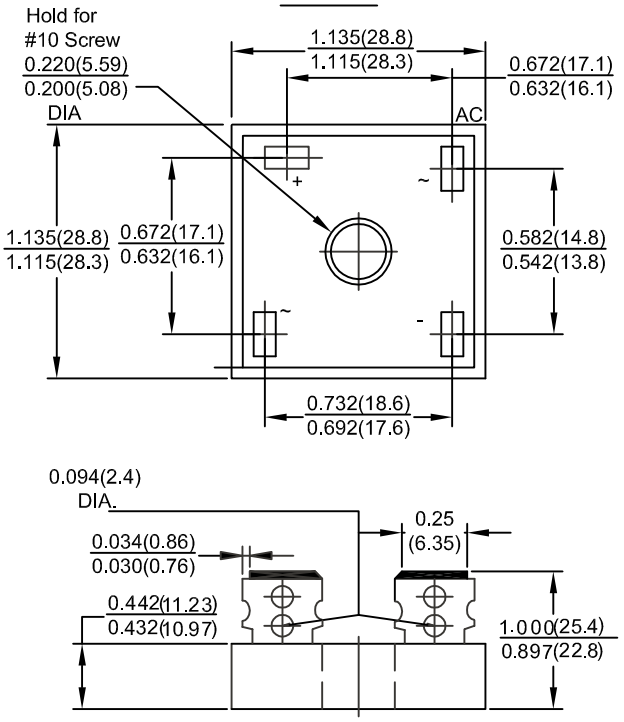


FIG.4- TYPICAL JUNCTION CAPACITANCE

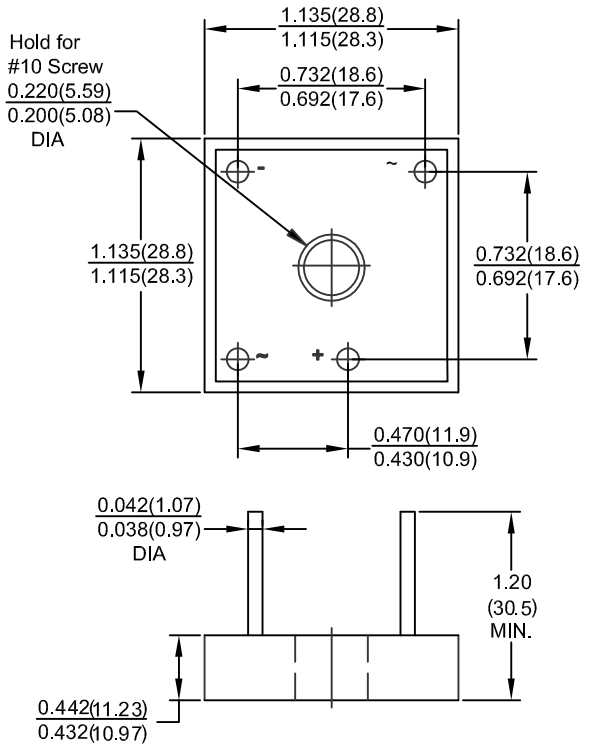


KBPC-T



Dimensions in Inches and (millimeters)

KBPC-W



Dimensions in Inches and (millimeters)