



SINGLE PHASE SILICON BRIDGE RECTIFIER

FEATURES:

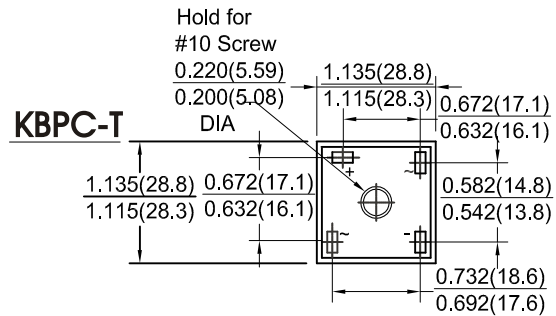
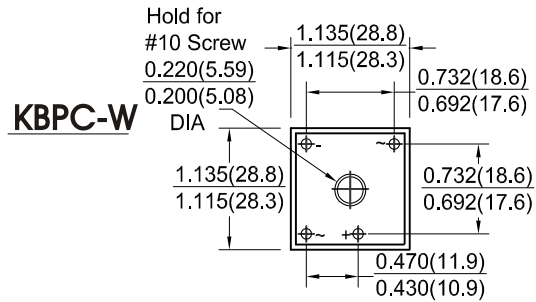
- High efficiency
- Silicon Junction
- Metal case
- Rating to 1000 V PRV

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
		35005 T/W	3501 T/W	3502 T/W	3504 T/W	3506 T/W	3508 T/W	3510 T/W	
		Marking KBPC 35005	Marking KBPC 3501	Marking KBPC 3502	Marking KBPC 3504	Marking KBPC 3506	Marking KBPC 3508	Marking KBPC 3510	
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 $T_c=55^\circ C$	I_o	35							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 $I_F=17.5A$	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage Per leg $T_c=25^\circ C$ $T_c=100^\circ C$	I_R	5.0 500							μA
Typical thermal resistance (NOTE1)	R_{th-JC}	1.4							$^\circ C/W$
Typical junction capacitance(NOTE2)	C_J	300							Pf
Operating junction and Storage temperature range	T_J, T_{Stg}	-55to+150							$^\circ C$

NOTES:

(1) Device mounted on 300mm x 300mm x 1.6mm cu Plate Heaksink

(2) Measured at 1MHZ and applied reverse voltage of 4.0VD.C.



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

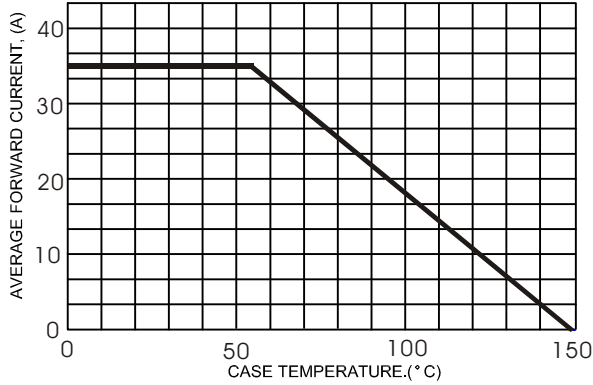


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

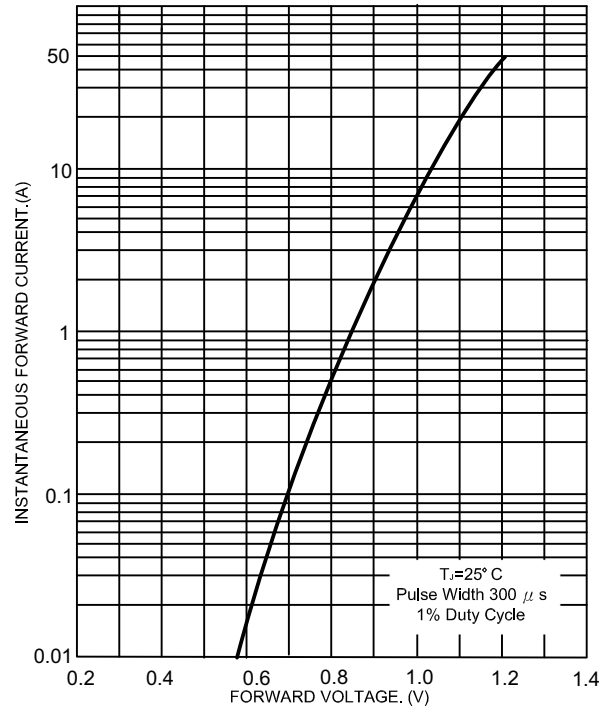


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

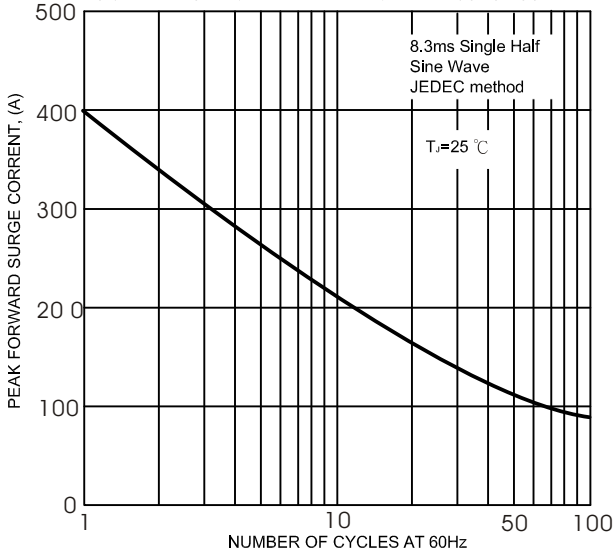


FIG.4- TYPICAL JUNCTION CAPACITANCE

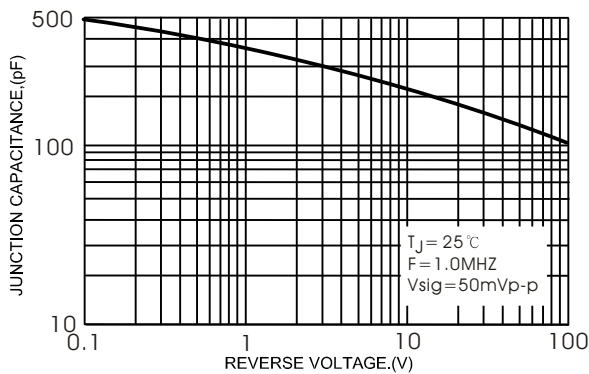
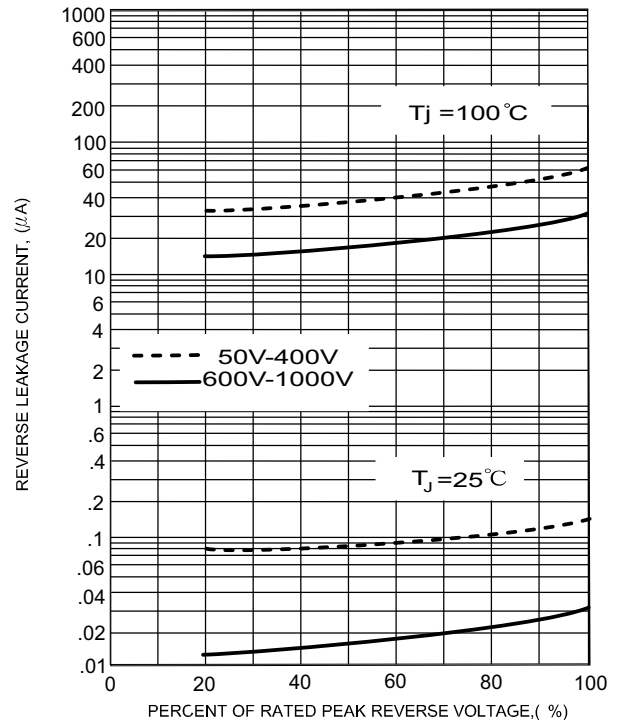
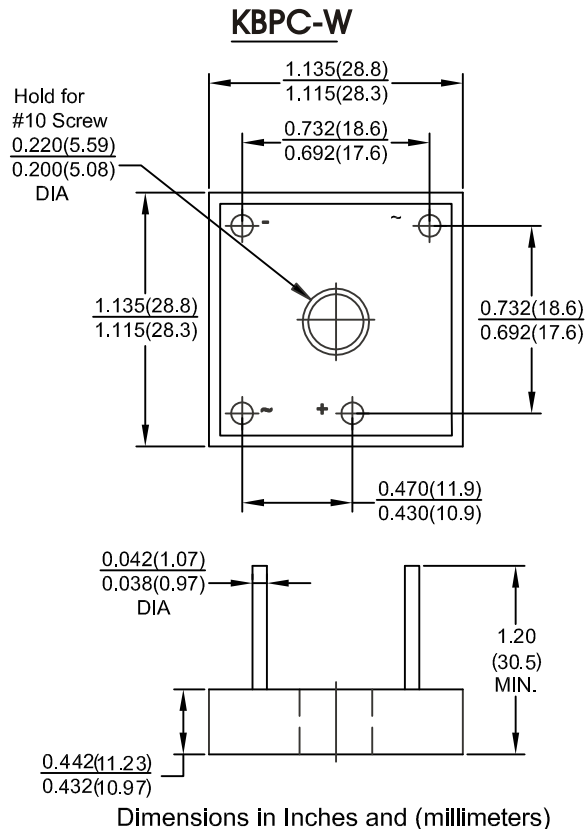
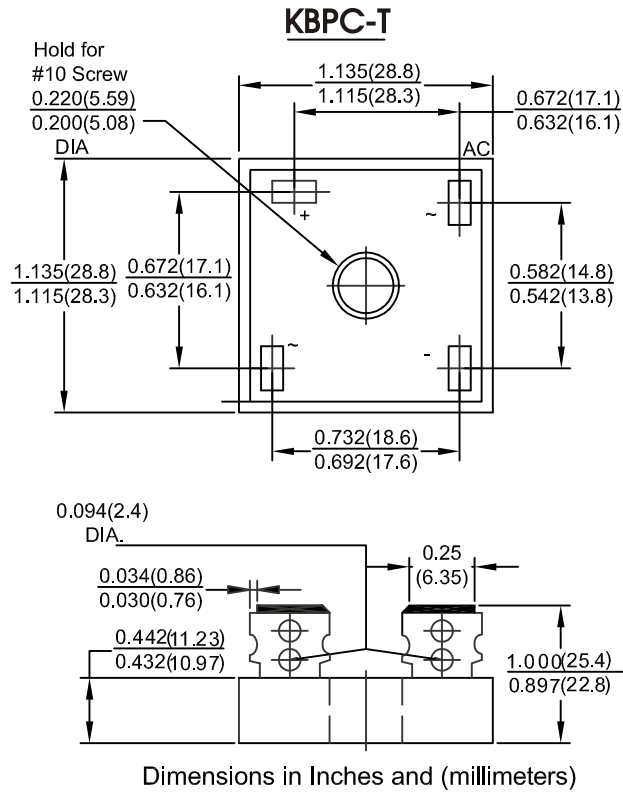


FIG.5- TYPICAL REVERSE CHARACTERISTICS





RATINGS AND CHARACTERISTIC CURVES





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