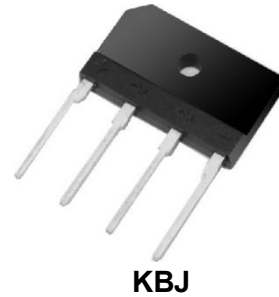


### 8A Single Phase Bridge Rectifier

#### Features

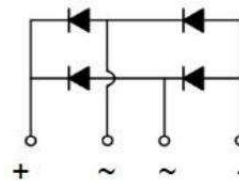
- Ideal for printed circuit boards
- High case dielectric strength
- Reverse Voltage : 50 to 1000V
- Forward Current : 8A
- High temperature soldering : 260 °C/10s at terminals



KBJ

#### Applications

- General purpose use in AC/DC bridge full wave rectification for printer, power supply, switching mode power supply, adapter, and home appliances applications.



#### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	KBJ 8005	KBJ 801	KBJ 802	KBJ 804	KBJ 806	KBJ 808	KBJ 810	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C=100^{\circ}C$ with heatsink (Note 1)	$I_{F(AV)}$	8.0							A
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)	$I_{FSM}$	175							A
Rating for fusing ( $t < 8.3ms, T_j = 25^{\circ}C$ )	$I^2t$	127							A <sup>2</sup> s
Maximum Instantaneous Forward Voltage @4.0A	$V_F$	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}C$	10							$\mu A$
	$T_A=125^{\circ}C$	500							
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	3.0							$^{\circ}C/W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	(-55 to +150)							$^{\circ}C$

#### Notes:

1. Device mounted on 75mm\*75mm\*1.6mm Al plate heatsink.

### Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

FIG.1 - Typical forward current

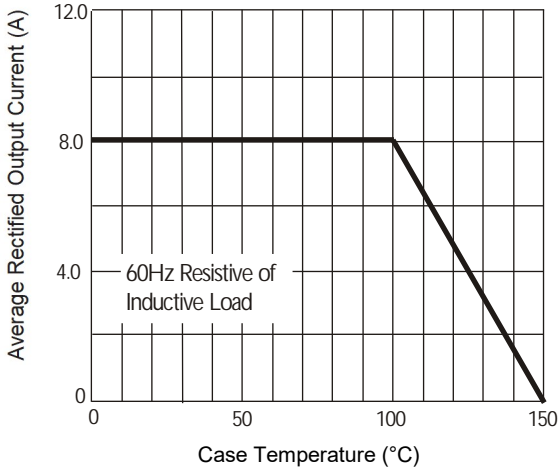


FIG.2 - Maximum Non-Repetitive Peak Forward Surge Current

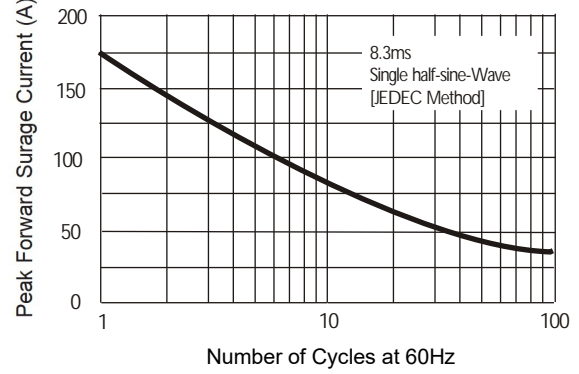


FIG.3 - Typical Junction Capacitance

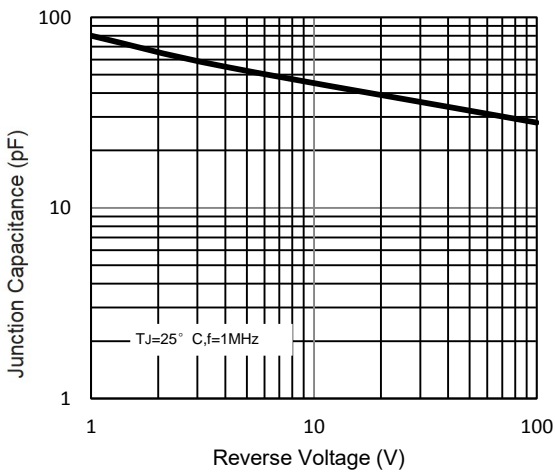


FIG.4 - Typical Instantaneous Forward Characteristics

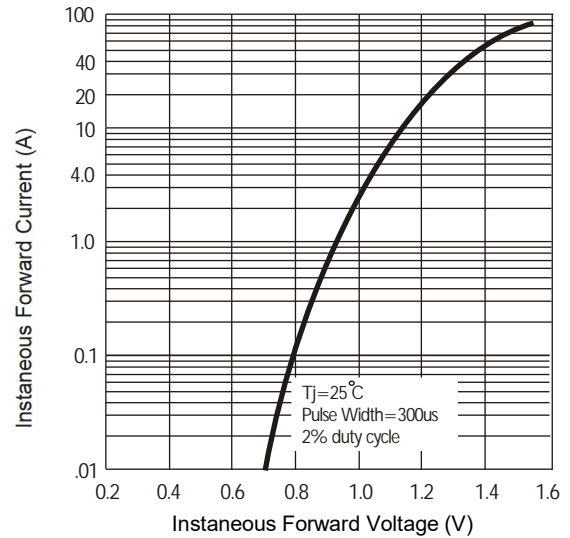
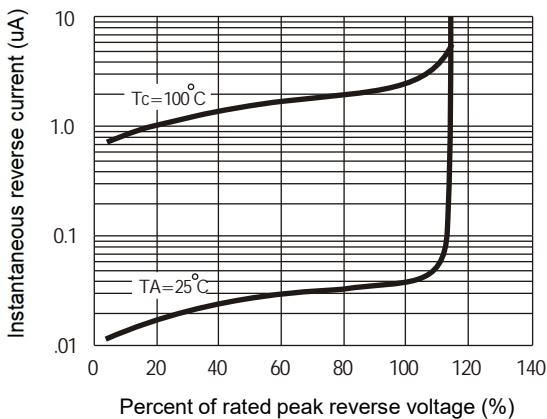
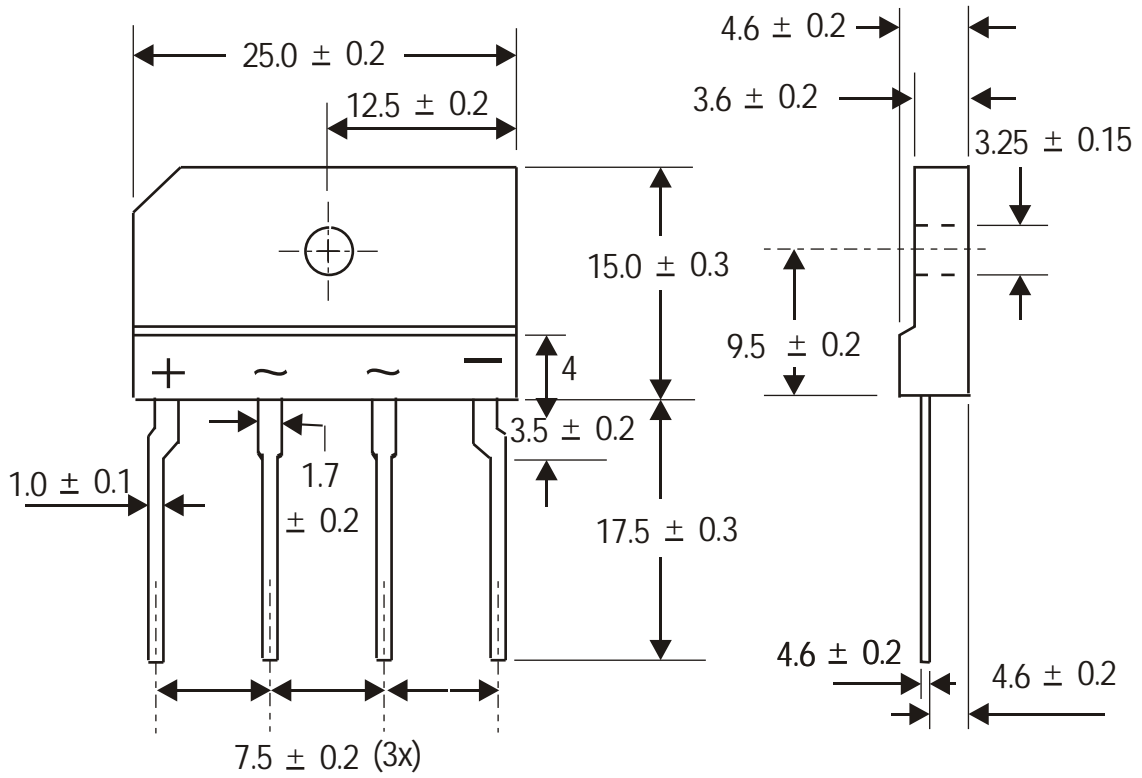


FIG.5 - Typical reverse Characteristics



**Package Outlines (Dimensions in mm)**

Plastic surface mounted package(KBJ)



Dimensions in millimeters(1mm =0.0394")

**\*Important Usage Information and Disclaimer**

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