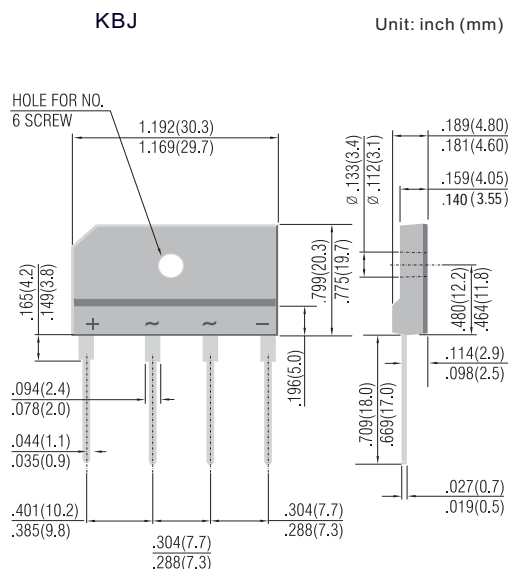


## KBJ1001~KBJ1010

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 100 to 1000 Volts CURRENT 10 Ampere



## FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 200 Amperes peak
- High temperature soldering guaranteed:  
260°C/10 seconds/.375"(9.5mm) lead length at 5 lbs. (2.3kg) tension
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

## MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Leads solderable per MIL-STD-750, Method 2026

Mounting position: Any

Mounting torque: 5 in. lb. Max.

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25 C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current voltage by 20%.

PARAMETER	SYMBOL	KBJ1001	KBJ1002	KBJ1004	KBJ1006	KBJ1008	KBJ1010	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum Average Forward TC=100 °C Rectified Output Current at TA=45 °C	$I_{AV}$	10.0 8.0						A
$I^2t$ Rating for fusing ( t<8.3ms)	$I^2t$	166						A <sup>2</sup> sec
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200						Apk
Maximum Instantaneous Forward Voltage Drop per element at 5.0A	$V_F$	1.0						Vpk
Maximum Reverse Leakage Current at Rated @ TA=25°C Dc Blocking Voltage @ TA=100°C	$I_R$	10 500						uA
Typical Thermal Resistance per leg (Note 2) (Note 3)	R $\theta$ JA R $\theta$ JC	18.0 3.1						°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150						°C

## NOTES:

1. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.
2. Units Mounted in free air, no heatsink, P.C.B at 0.375"(9.5mm) lead length with 0.5 x 0.5"(12 x 12mm)copper pads.
3. Units Mounted on a 2.6 x 1.4" x 0.06" thick ( 6.5 x 3.5 x 0.15cm) AL plate.

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## RATING AND CHARACTERISTIC CURVES

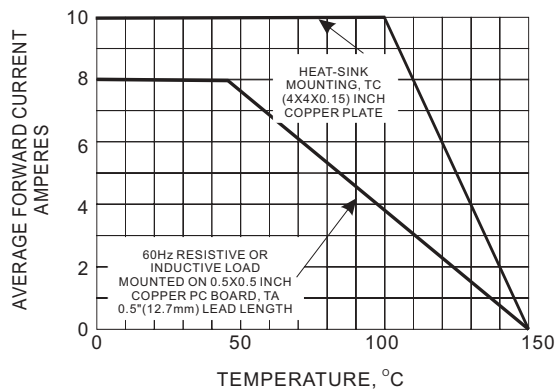


Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

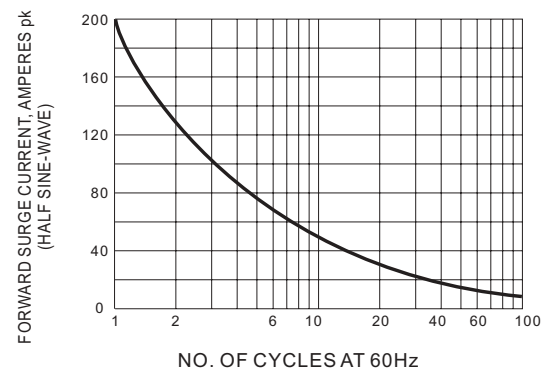


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

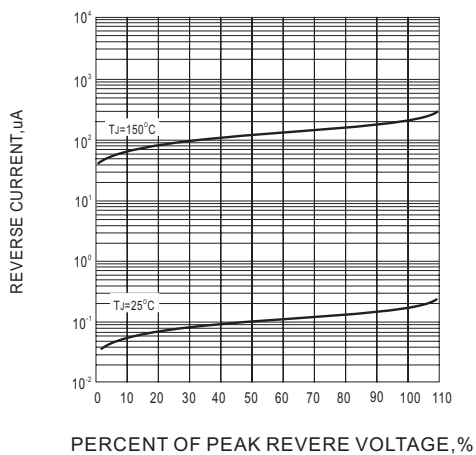


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

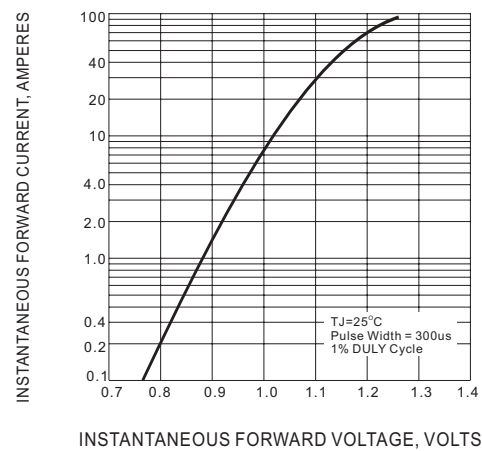


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

The curve graph is for reference only, can't be the basis for judgment

## **KBJ1001~KBJ1010**

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