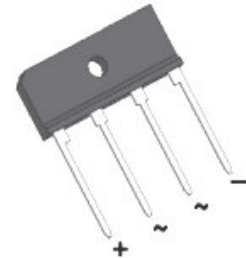


RoHS compliant product

## FEATURES

- Thin Single In-Line Package
- Ideal for Printed Circuit Boards
- Glass Passivated Chip Junction
- Low Profile Package
- High Surge Current Capability
- Plastic Package has Underwrites Laboratory Flammability Classification 94V-0

KBJL

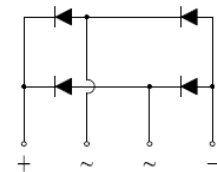


## MECHANICAL DATA

- Case: KBJL  
Epoxy meets UL-94V-0 Flammability Rating
- Terminals: Matte Tin Plated Leads, Solderable per J-STD-002 and JESD22-B102, E3 Suffix for Customer Grade, meets JESD 201 Class 1A Whisker Test
- High Temperature Soldering Guaranteed:  
Solder Dip 270°C, 10seconds
- Polarity: As Marked on Body

## ORDER INFORMATION

Part Number	Type
KBJL15J~KBJL15M	Lead (Pb)-free
KBJL15JE~KBJL15ME	Lead (Pb)-free and Halogen-free



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Ratings			Unit
		KBJL15J	KBJL15K	KBJL15M	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	420	560	700	
Maximum DC Blocking Voltage	$V_{DC}$	600	800	1000	
Maximum Average Forward Rectified Output Current	$I_F$	$T_C=110^\circ\text{C}^1$			A
		$T_A=25^\circ\text{C}^2$			
Peak Forward Surge Current, 8.3ms single sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	240			A
Rating for Fusing @ $t<8.3\text{ms}$	$I^2t$	240			A <sup>2</sup> S
Maximum Instantaneous Forward Voltage Drop per leg @7.5A	$V_F$	1			V
Maximum DC Reverse Current @Rated DC Blocking Voltage per leg	$I_R$	$T_A=25^\circ\text{C}$			$\mu\text{A}$
		$T_A=125^\circ\text{C}$			
Typical Thermal Resistance, Junction-Ambient <sup>2</sup>	$R_{\theta JA}$	25			°C/W
Typical Thermal Resistance, Junction-Case <sup>1 3</sup>	$R_{\theta JC}$	2.5			
Operating Junction & Storage Temperature Range	$T_J, T_{STG}$	-55~150			°C

Notes:

1. Unit case mounted on Al plate heatsink.
2. Units mounted on PCB without heatsink.
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

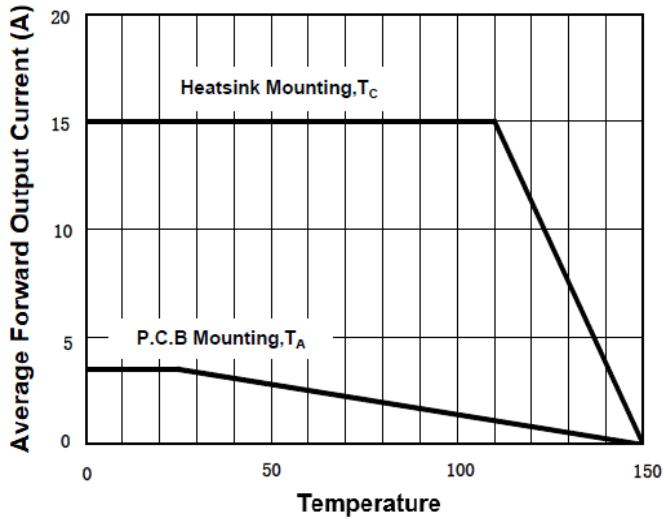


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

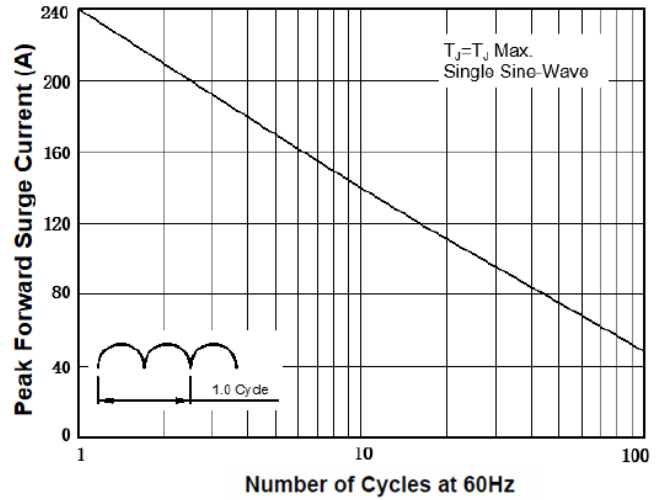


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

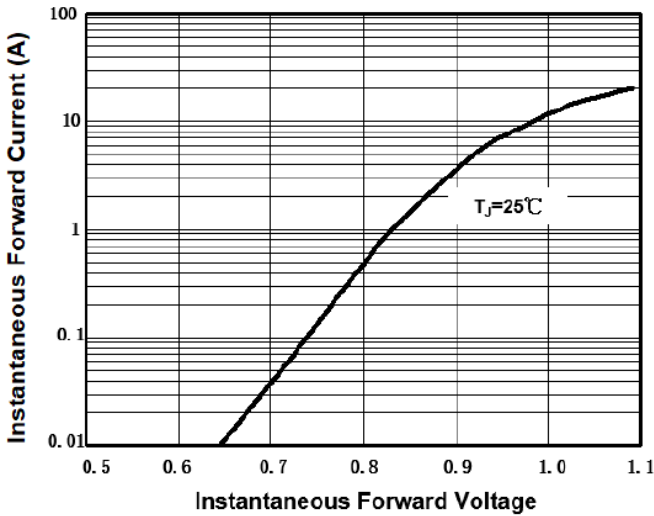
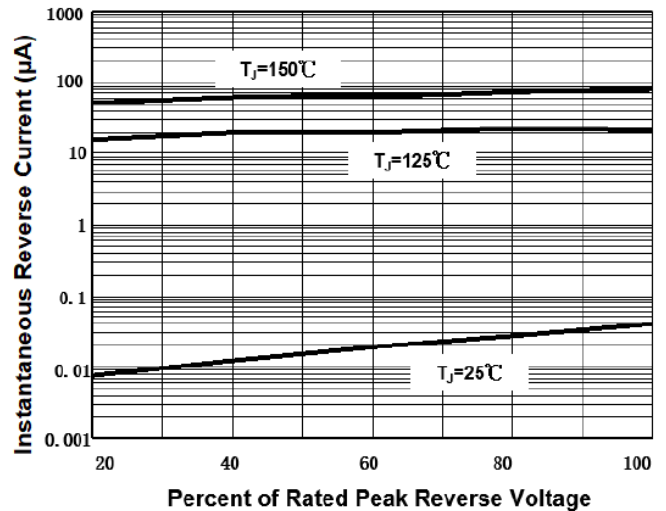
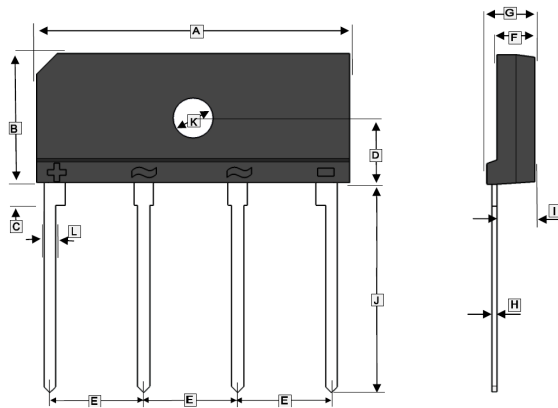


FIG.4-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS



**PACKAGE OUTLINE DIMENSIONS**

**KBJL**



REF.	Millimeter	
	Min.	Max.
A	24.70	25.30
B	10.00	10.60
C	1.70 TYP.	
D	5.50	5.90
E	7.30	7.70
F	2.80	3.20
G	3.60	4.00
H	0.30	0.70
I	2.50	2.90
J	17.7	18.7
K	3.00	3.40
L	0.90	1.10