

## General Purpose Bridge Rectifier

### Features

- $I_o$  10 A
- $V_{RRM}$  50V-1000V
- High surge current capability
- Glass passivated chip

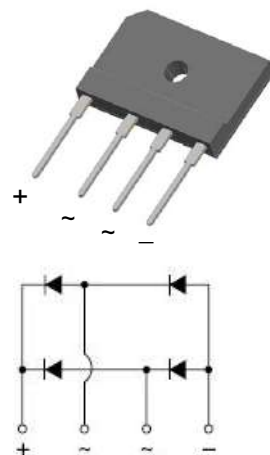
### Applications

- General purpose 1 phase Bridge rectifier applications

### Marking

- KBJ10XX
- XX : From 005 To 10

KBJ



### Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	KBJ10						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
Average Rectified Output Current	$I_o$	A	60Hz sine wave, R-load	With heatsink $T_c = 100^\circ\text{C}$						
				Without heatsink $T_c = 100^\circ\text{C}$						
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz half-sine wave, 1 cycle, $T_j = 25^\circ\text{C}$	220						
Current Squared Time	$I^2t$	$\text{A}^2\text{S}$	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j = 25^\circ\text{C}$ , Rating of per diode	120						
Storage Temperature	$T_{stg}$	$^\circ\text{C}$		-55 ~ +150						
Junction Temperature	$T_j$	$^\circ\text{C}$		-55 ~ +150						

### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	$V_{FM}$	V	$I_{FM} = 5.0\text{A}$ , Pulse measurement, Rating of per diode	0.95
Peak Reverse Current	$I_{RRM}$	$\mu\text{A}$	$V_{RM} = V_{RRM}$ , Pulse measurement, Rating of per diode	5
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient, Without heatsink	20
	$R_{\theta J-C}$		Between junction and case, With heatsink	1.4

**Typical Characteristics**

FIG.1-FORWARD CURRENT DERATING CURVE

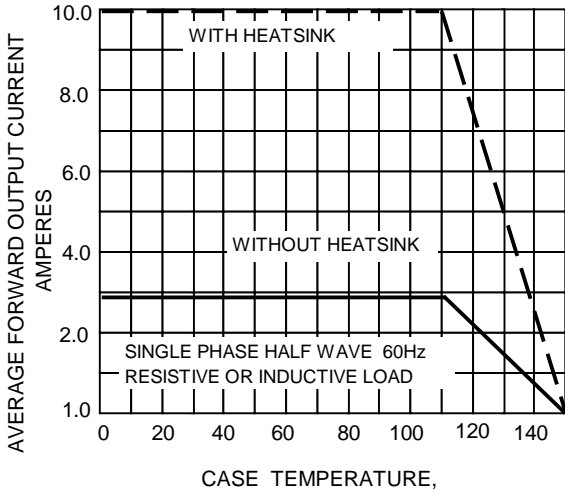


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

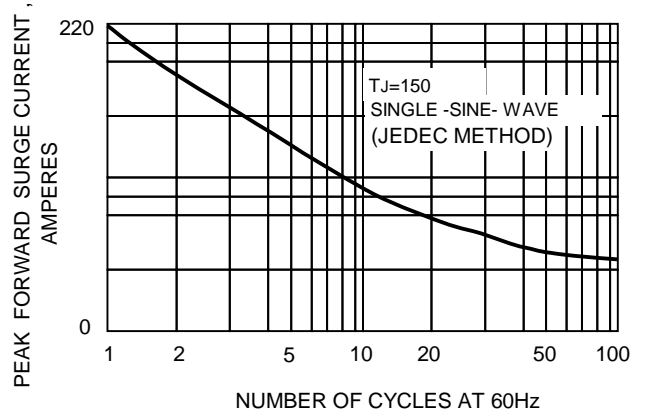


FIG.3-TYPICAL JUNCTION CAPACITANCE

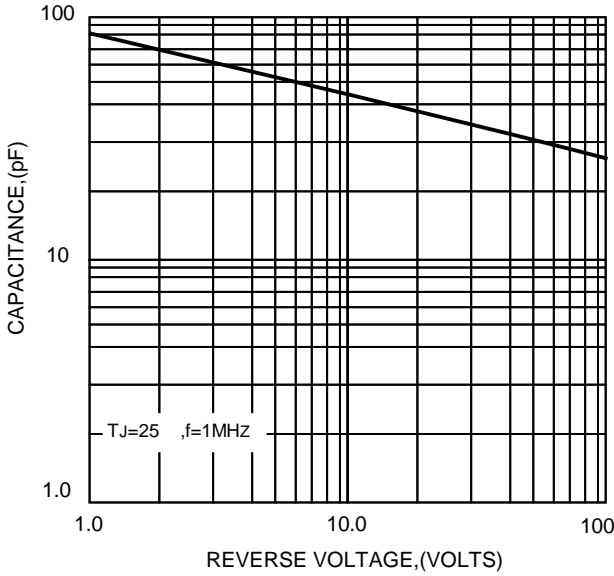


FIG.4-TYPICAL FORWARD CHARACTERISTICS

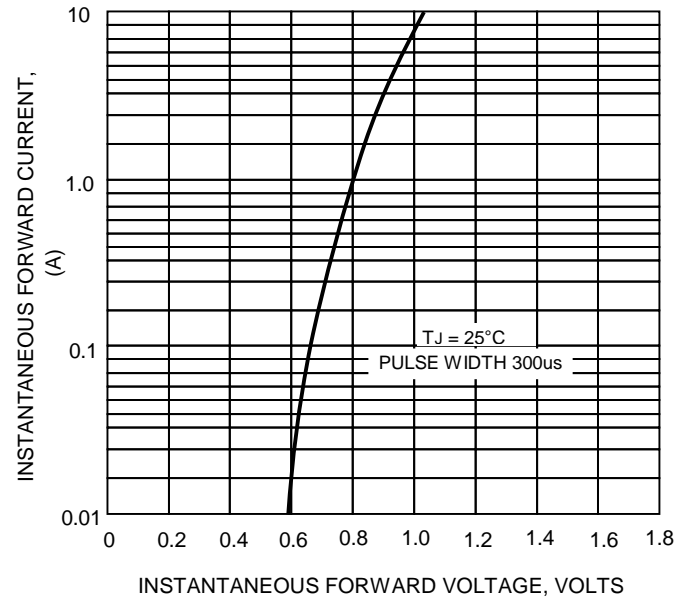
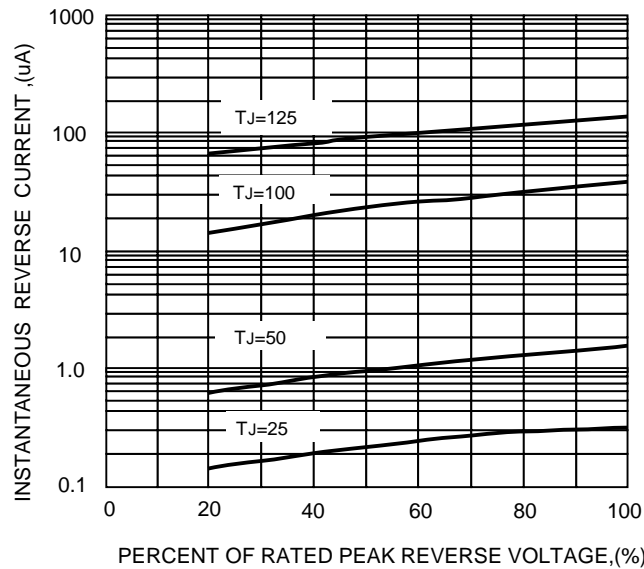
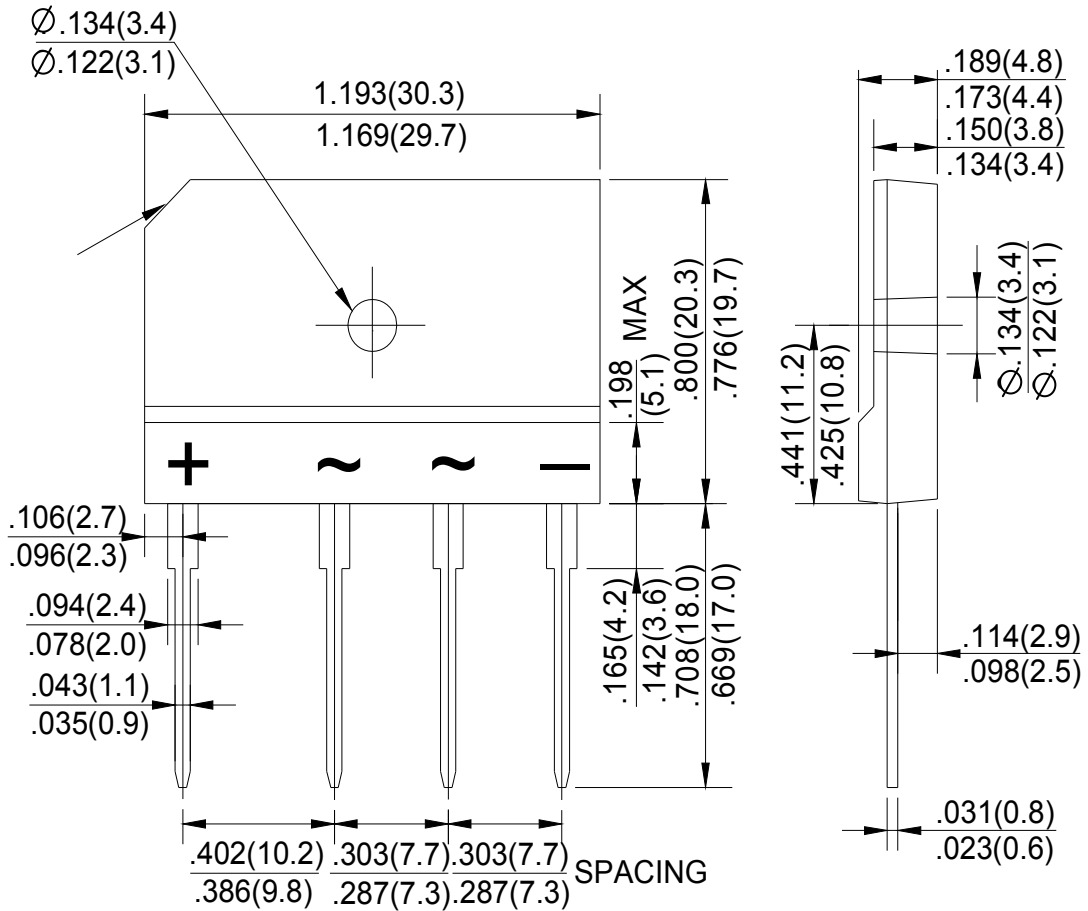


FIG.5-TYPICAL REVERSE CHARACTERISTICS



**KBJ Package Outline Dimensions**



Dimensions in inches and (millimeters)