

# KBJ10005 THRU KBJ1010

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE: 50 to 1000 V

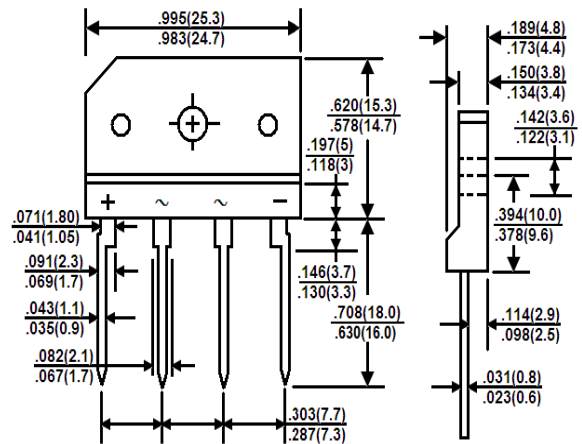
FORWARD CURRENT: 10 A

### Features

- Glass passivated chip junction
- Low reverse leakage current
- Low forward voltage drop
- High surge current capability

### Mechanical data

- Case: Molded plastic, KBJ
- Mounting Position: Any

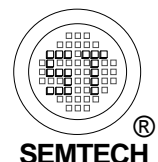


Dimensions in mm

### Absolute Maximum Ratings and Characteristics

Ratings 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%.

Parameter	Symbols	KBJ 10005	KBJ 1001	KBJ 1002	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	Units
Maximum Recurrent 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 with Heatsink at $T_c = 100^\circ\text{C}$	$I_{(AV)}$	10							A
Peak Forward Surge Current, 8.3 ms Single Half-Sine -Wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	170							A
Maximum Forward Voltage at 5 A DC	$V_F$	1							V
Maximum Reverse Current at $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	$I_R$	5 500							$\mu\text{A}$
Typical Thermal Resistance, with heatsink	$R_{\theta JC}$	1.9							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{Stg}$	- 55 to + 150							$^\circ\text{C}$



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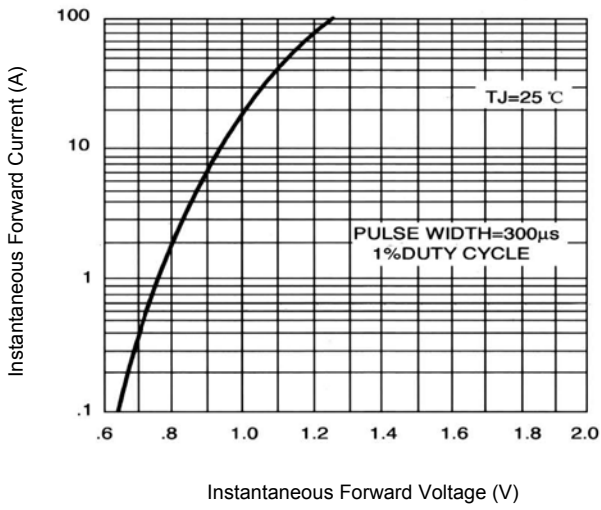


Figure 1. Typical Instantaneous Forward Characteristics Per Element

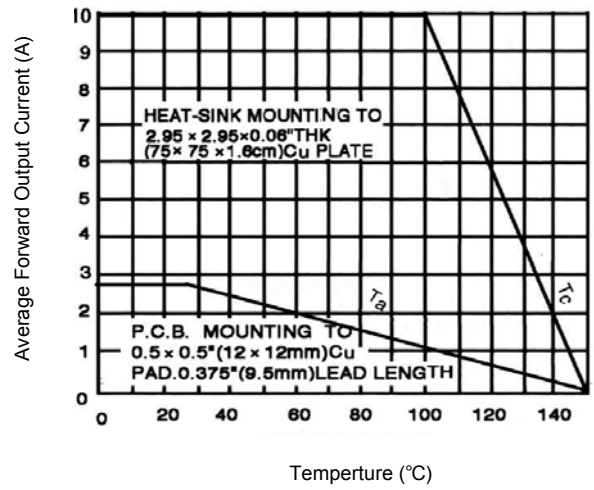


Figure 2. Forward Output Current Derating Curve

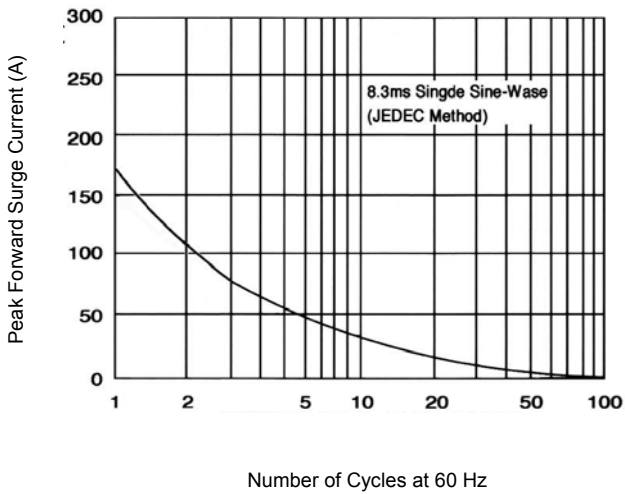


Figure 3. Maximum Non Repetitive Forward Surge Current Per Element

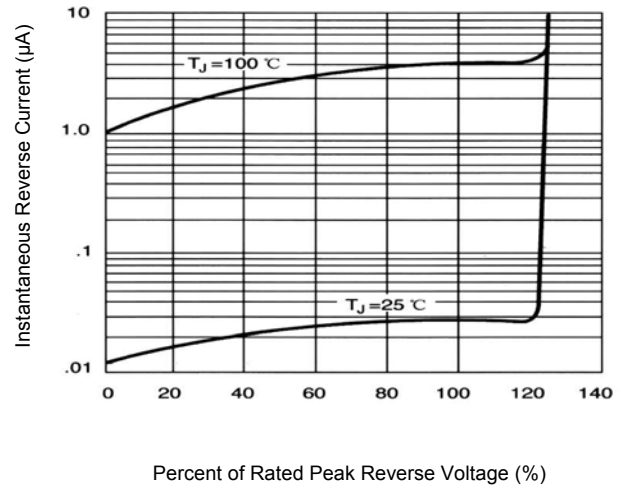


Figure 4. Typical Reverse Characteristics Per Element

