

# KBJ25005 THRU KBJ2510

## Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts

Current 25 Amperes

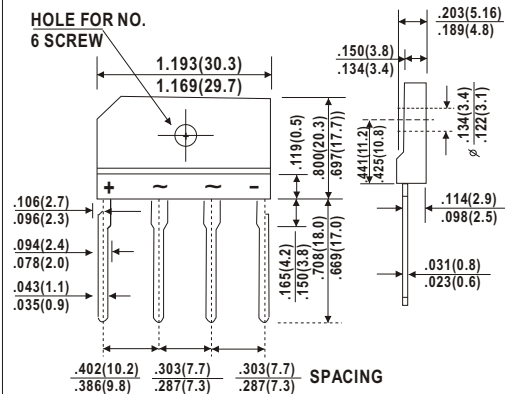
### Features

- \* Rating to 1000v PRV
- \* Ideal for printed circuit board
- \* Low forward voltage drop , high current capability
- \* Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- \* The plastic material has UL flammability classification 94V-0

### Mechanical Data

- \* Polarity : Symbols molded on body
- \* Weight : 0.23 ounces, 6.6 grams
- \* Mounting position : Any

### KBJ



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating 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%

CHARACTERISTICS	SYMBOL	KBJ 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 2506	KBJ 2508	KBJ 2510	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(with heatsink Note2) Rectified Current @ $T_c = 100^\circ\text{C}$	$I_{(AV)}$	25.0 4.2							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	$I_{FSM}$	350							A
Maximum Forward Voltage at 2.0A DC	$V_F$	1.05							V
Maximum DC Reverse Current $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J = 125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$
I' t Rating for fusing( $t < 8.3\text{ms}$ )	$I' t$	510							A' S
Typical Junction Capacitance per element( Note1 )	$C_J$	85							pF
Typical Thermal Resistance( Note 2 )	$R_{\theta JC}$	0.6							$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

#### NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 VDC.
2. Device mounted on 300mm x 300mm X1.6mm Cu Plate Heatsink

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## RATINGS AND CHARACTERISTIC CURVES (KB25005 THRU KBJ2510)

FIG. 1 - FORWARD CURRENT DERATING CURVE

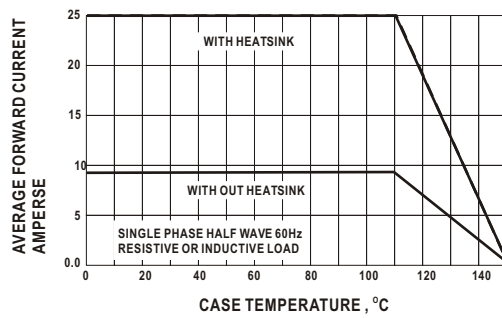


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

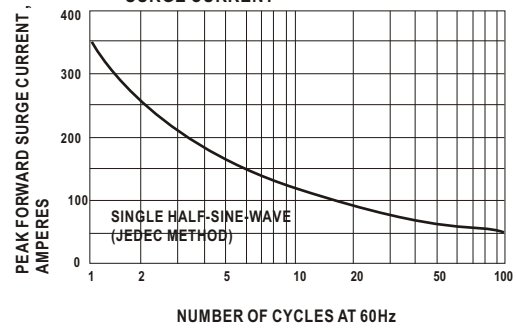


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

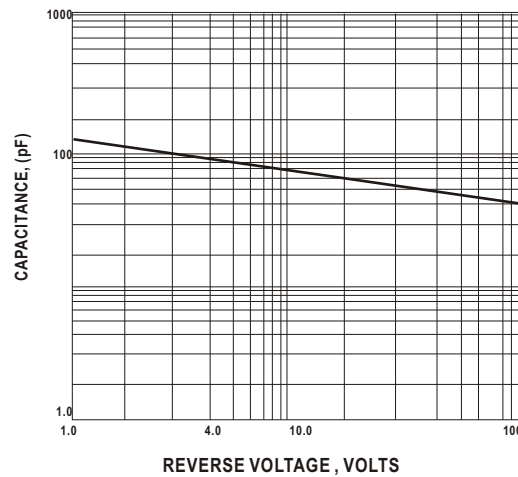


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

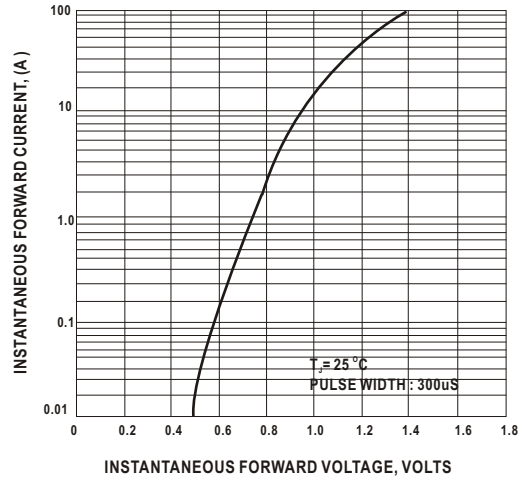


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

