



## KBJ10005 THRU KBJ1010

**PINGWEI ENTERPRISE SINGLE PHASE 10.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS**

<p><b>FEATURE</b></p> <ul style="list-style-type: none"> <li>. UL Listed Under Recognized Component Index, File Number E338195</li> <li>. Glass passivated chip junctions</li> <li>. High case dielectric strength</li> <li>. Low Reverse Leakage Current</li> <li>. High surge current capability</li> <li>. Ideal for Printed Circuit Board Applications</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>. Case: KBJ</li> <li>. Case Material: Molded Plastic.</li> <li>UL Flammability Classification Rating 94V-0</li> <li>. Terminals: Pure tin plated, Lead free.</li> <li>Leads solderable per MIL-STD-750, Method 2026.</li> <li>. Polarity: Molded on Body</li> <li>. Mounting: Through Hole for #6 Screw</li> <li>. Mounting Torque: 5.0 in-lbs Maximum</li> <li>. Weight: 4.3 grams</li> </ul>	<p style="text-align: center;"><b><u>KBJ</u></b></p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
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### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	SYM BOL	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 (with heatsink Note2) Rectified Current @ $T_C=110^\circ\text{C}$ (without heatsink)	$I_{F(AV)}$	10.0						3.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	220								A
Maximum Forward Voltage @ 10.0A DC Drop per element @ 5.0A DC	$V_F$	1.1						1.05		V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	$I_R$	10.0						500.0		$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	200								$\text{A}^2\text{Sec}$
Typical Junction Capacitance (Note 1)	$C_J$	70								pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	2.0								$^\circ\text{C}/\text{W}$
Storage Temperature	$T_{STG}$	-55 to +150								$^\circ\text{C}$
Operating Junction Temperature	$T_J$	-55 to +150								$^\circ\text{C}$

**Note:**

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heatsink.

# RATING AND CHARACTERISTIC CURVES (KBJ10005 THRU KBJ1010)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

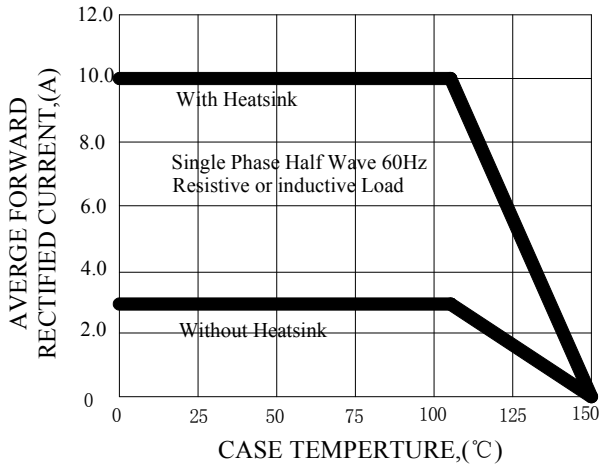


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

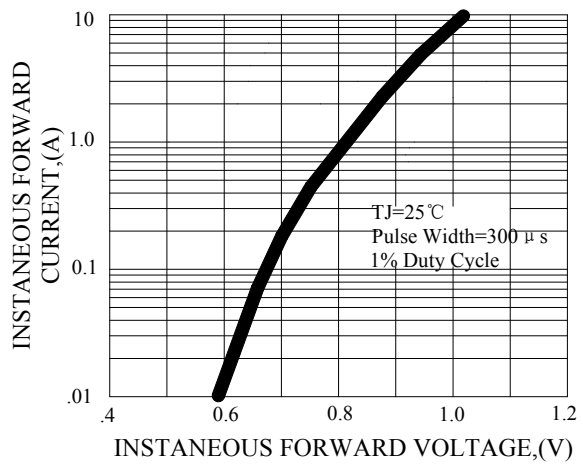


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

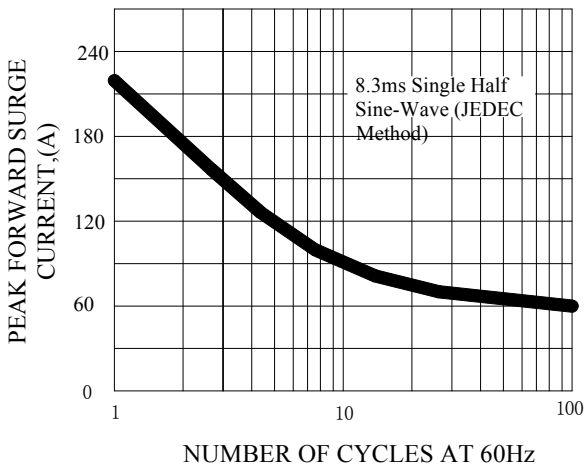


FIG.4-TYPICAL JUNCTION CAPACITANCE

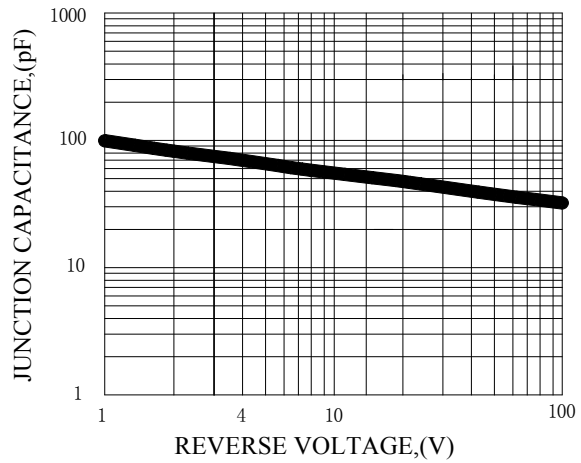


FIG.5-TYPICAL REVERSE CHARACTERISTICS

