# **KBJ6005 THRU KBJ610**

#### SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

## FEATURES

- ◆Rating to 1000V PRV.
- ◆Ideal for printed circuit board.
- ◆ Reliable low cost construction utilizing molded plastic Technique.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-1500 Volts.

### Mechanical Data

- ◆Polarity: Symbols molded on body.
- ◆Weight: 0.15 ounces, 4.0 grams.
- ◆Mounting position: Any.

#### \$.134 (3.4) 995 (25.3) 983 (24.7) $\begin{vmatrix} 157 \\ (4.0) \\ 602 (15.3) \end{vmatrix}$ 366 (9.3) .057 (1.45) 041 (1.05) 074 (1.9) .114 (2.9) .043 (1.1) .098 (2.5) .035 (0.9) 031 (0.8) .023 (0.6) 303 (7.7) 303 (7.7) .287 (7.3)

**KBJ** 

**Dimensions in inches and (millimeters)** 

## 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, derate current by 20%

PARAMETER	SYMBOL	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{\text{RRM}}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	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 Note 2) Rectified Current @ $T_C$ =110 $^{\circ}$ C(without heatsink)	I(AV)	6.0							A
Peak Forward Surge Current									A
8.3ms single half sine-wave	I <sub>FSM</sub> 170								
superimposed on rated load (JEDEC METHOD)									
Maximum forward Voltage at 3.0A DC	$V_{\mathrm{F}}$	1.0							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C	$ m I_R$	5.0							
at Rated DC Blocking voltage @T <sub>J</sub> =125°C	1R	500							μΑ
I <sup>2</sup> t Rating for fusing(t<8.3ms)	$I^2t$	120							$A^2S$
Typical Junction	C	80							pF
Capacitance per element(Note 1)	$C_{J}$								
Typical Thermal Resistance (Note 2)	Røjc	1.5							°C/W
Operating Temperature Range	$T_J$	-55 to +150							$^{\circ}$
Storage Temperature Range	Тѕтс	-55 to +150							$^{\circ}$

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.

2. Unit Mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.



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## RATING AND CHARACTERISTIC CURVES KBJ6005 THRU KBJ610

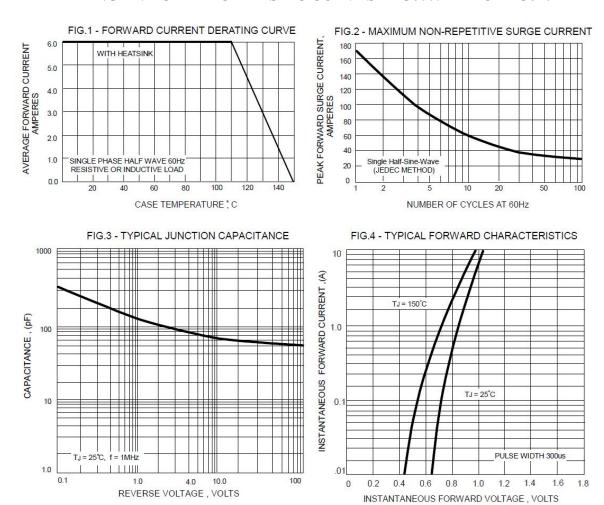


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

1000

TJ = 150°C

TJ = 125°C

TJ = 100°C

TJ = 25°C

100

0 20 40 60 80 100 120 140

PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.