

**6.0A GLASS PASSIVATED BRIDGE RECTIFIER**

**Reverse Voltage - 100 to 1000 V**

**Forward Current – 6.0A**

**FEATURES**

- ◆ Surge overload rating-170 amperes peak
- ◆ Polarity:As marked on body
- ◆ Ideal for printed circuit board
- ◆ Plastic material has U/L

The flammability classification 94V-0

- ◆ Reliable low cost construction utilizing molded plastic technique

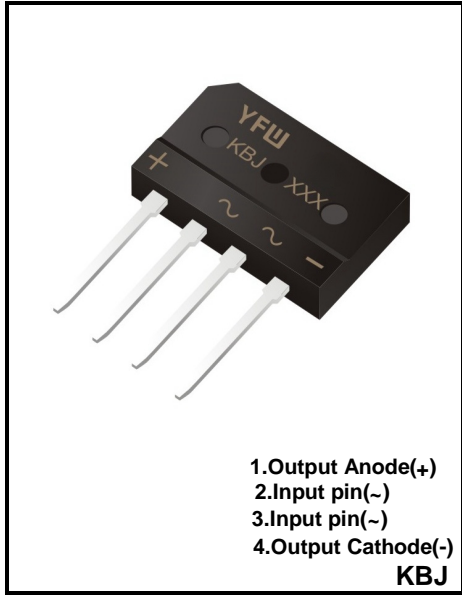
**MECHANICAL DATA**

- ◆ Case: KBJ
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 7.0g /0.26oz

**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.



Parameter	Symbols	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	6.0 2.8						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	170						A
Forward Voltage per element @ $I_F=3.0A$ DC	$V_F$	1.0						V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at Rated DC Blocking Voltage @ $T_J=125^{\circ}C$	$I_R$	10 500						$\mu A$
$I^2t$ Rating for Fusing( $3ms \leq t \leq 8.3ms$ )	$I^2t$	120						$A^2S$
Typical Junction Capacitance <sup>(Note1)</sup>	$C_j$	55						pF
Typical Thermal Resistance <sup>(Note2)</sup>	$R_{\theta JC}$	1.8						$^{\circ}C/W$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						$^{\circ}C$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Device mounted on 75mm\*75mm\*1.6mm cu plate heatsink

**Ratings And Characteristic Curves**

FIG.1-FORWARD CURRENT DERATING CURVE

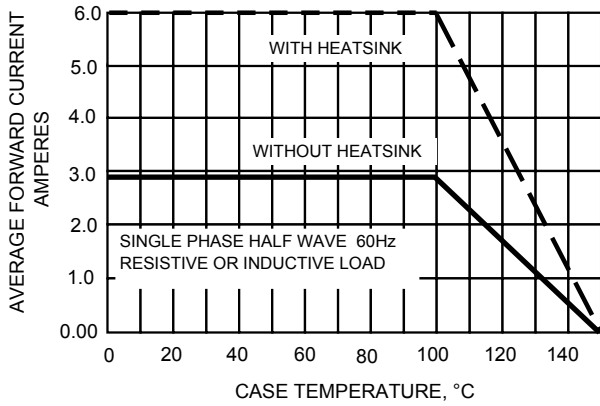


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

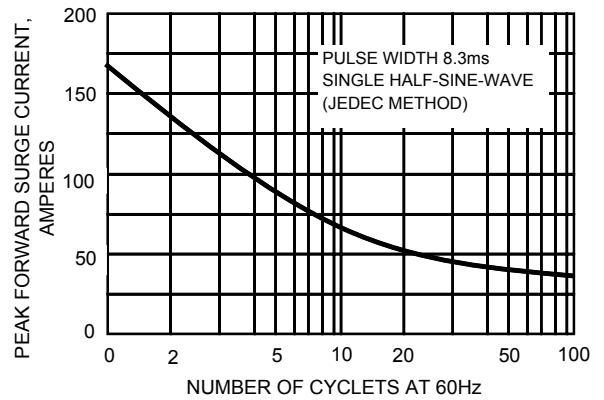


FIG.3-TYPICAL JUNCTION CAPACITANCE

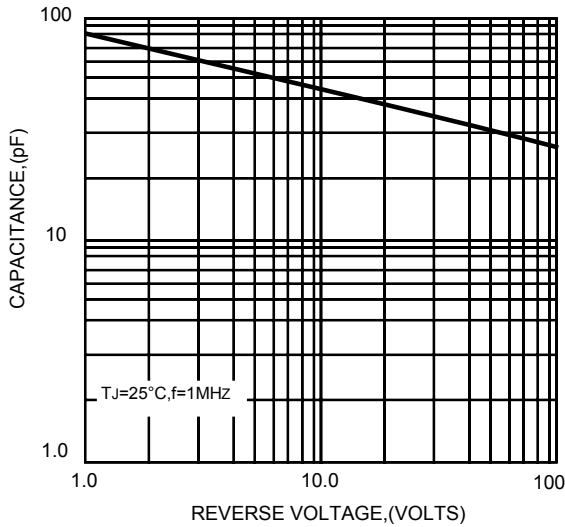


FIG.4-TYPICAL FORWARD CHARACTERISTICS

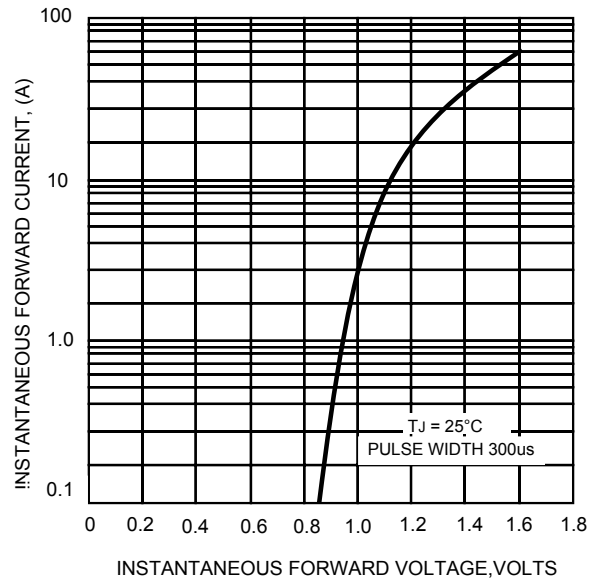
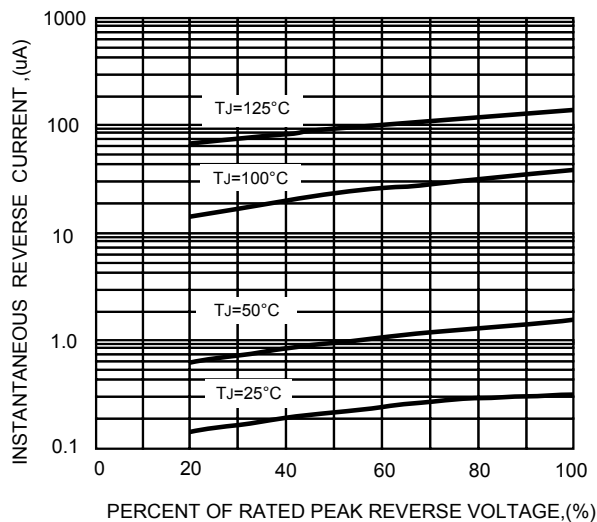
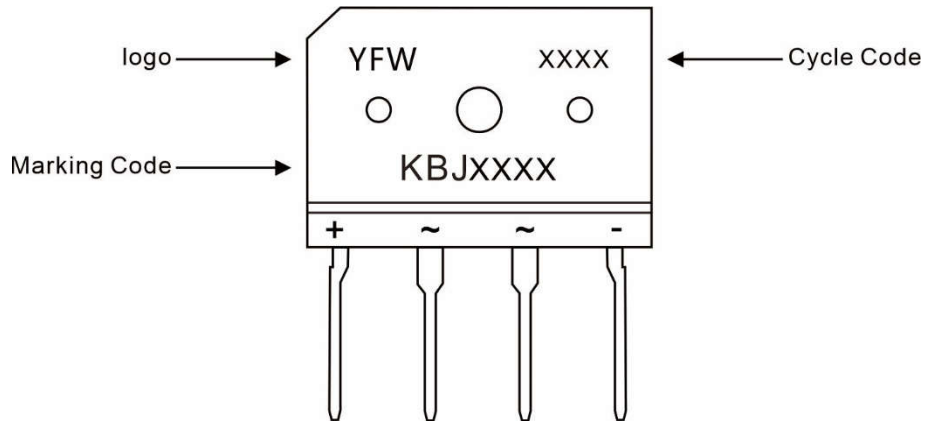


FIG.5-TYPICAL REVERSE CHARACTERISTICS



**Marking Diagram**



**Ordering information**

Package	Packing Description	Packing Quantity
KBJ	bulk	250PCS/Box 2500PCS/Carton

**Package Dimensions**

**KBJ**

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	24.70	25.30	0.97	1.00
B	14.70	15.30	0.58	0.60
C	1.65	2.25	0.06	0.09
D	1.50	1.90	0.06	0.07
E	0.90	1.10	0.04	0.04
F	3.20	3.80	0.13	0.15
G	17.00	18.00	0.67	0.71
H	7.30	7.70	0.29	0.30
I	4.40	4.80	0.17	0.19
J	3.40	3.90	0.13	0.154
K	9.20	9.80	0.36	0.39
L	3.00	3.60	0.12	0.14
M	2.50	2.90	0.10	0.11
N	0.55	0.75	0.02	0.03

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