

20A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

Forward Current – 20A

FEATURES

- ◆ Surge overload rating-320 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

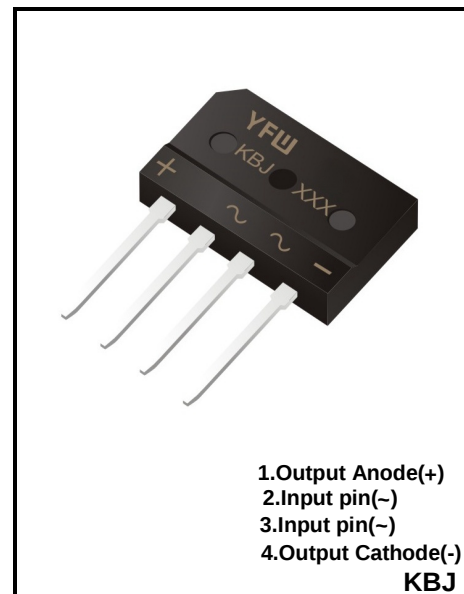
MECHANICAL DATA

- ◆ 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	KBJ2001	KBJ2002	KBJ2004	KBJ2006	KBJ2008	KBJ2010	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	$I_{(AV)}$	20 4.2						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	320						A
Forward Voltage per element @ $I_F=7.5A$ 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						μA
I^2t Rating for Fusing($3ms \leq t \leq 8.3ms$)	I^2t	510						A^2S
Typical Junction Capacitance (Note1)	C_j	70						pF
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	1.0						$^{\circ}C/W$
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 Derating Curve for Output Rectified Current

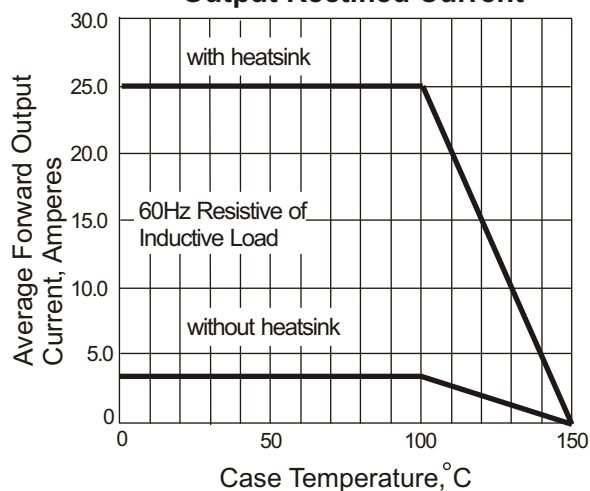


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

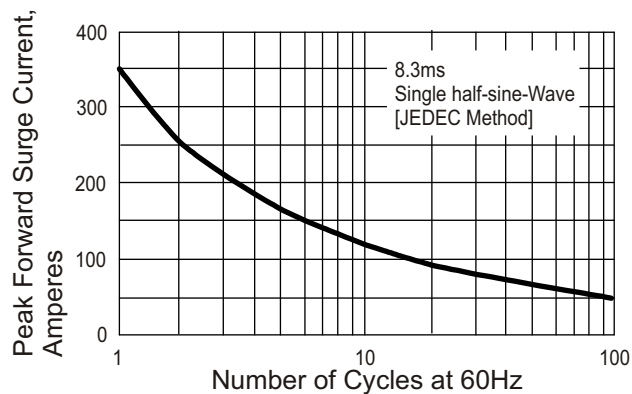


Fig. 3 Typical Instantaneous Forward Characteristics

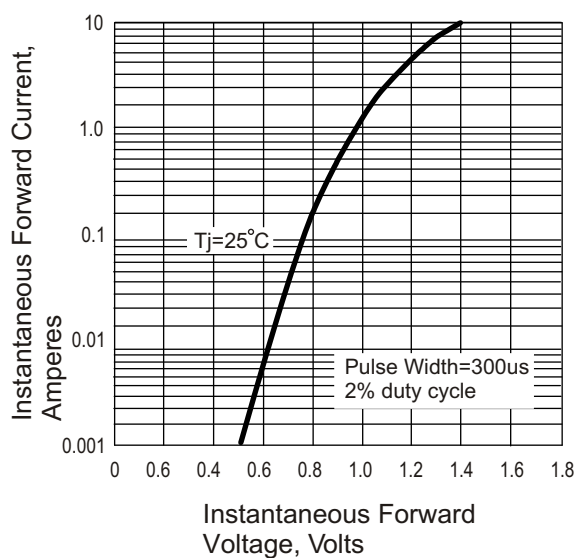


Fig. 4 Typical Reverse Characteristics at Tj=25°C

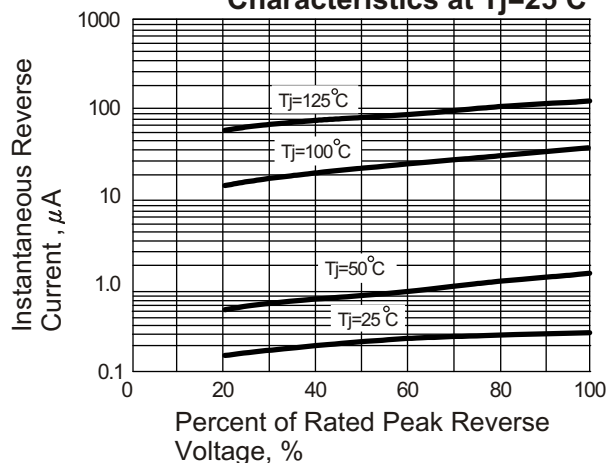
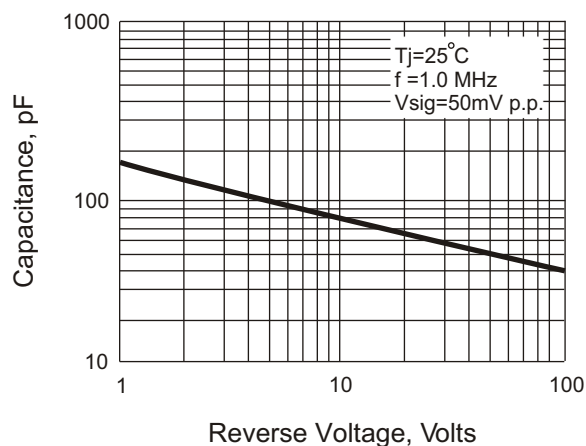
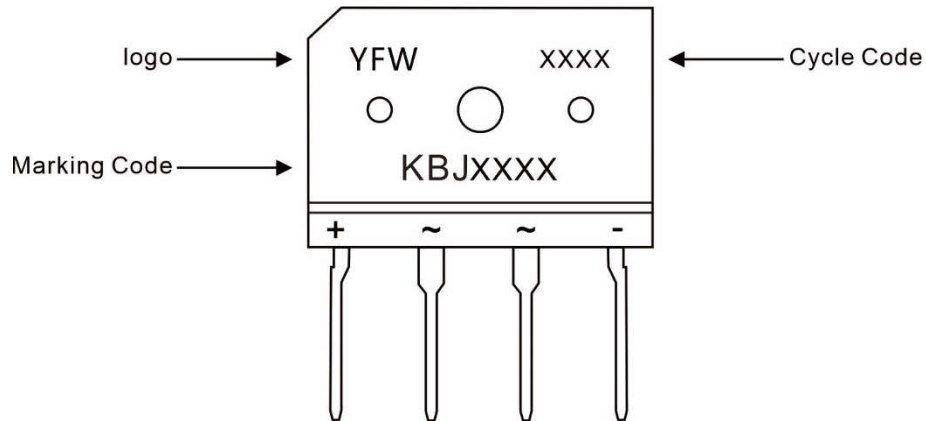


Fig. 5 Typical Junction Capacitance



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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