

**KBJ10005 THRU KBJ1010
BRIDGE RECTIFIER**

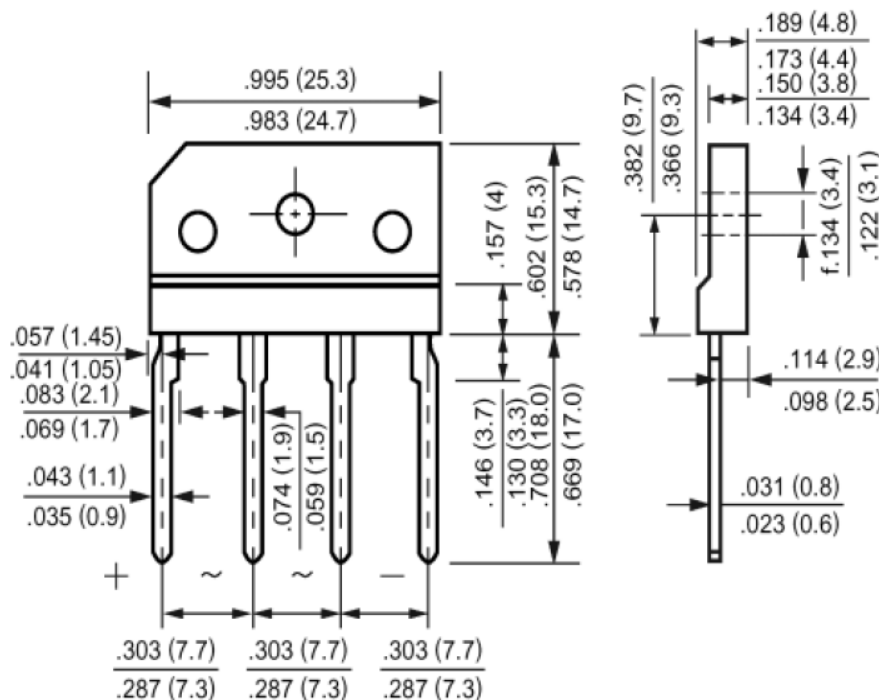
Features:

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 400 Amperes
- High temperature soldering guaranteed:
260° C/10 seconds/.375"(9.5mm) lead length at 5 lbs. (2.3kg) tension

Mechanical Data:

- Case: Molded plastic, KBJ
- Epoxy: UL 94V-O rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting position: Any
- Weight: 0.16ounce, 4.6gram

Mechanical Dimensions: In Inches/mm



KBJ

MARKING, MOLDING RESIN

Marking for Type Number, 1st row SSG YYWWL, 2nd row Type Number

Where YY is the manufacture year

WW is the manufacture week code

L is the wafer's Lot Number

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings:

Type Number	Symbol	KBJ 10005	KBJ 1001G	KBJ 1002	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	Unit
Maximum Recurrent Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 55^\circ C$	I_o	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	180							A

Electrical Characteristics:

Type Number	Symbol	KBJ 10005	KBJ 1001G	KBJ 1002	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	Unit
Maximum Forward Voltage @ $I_F = 5.0A$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	10							μA

Thermal-Mechanical Specifications:

Type Number	Symbol	KBJ 10005	KBJ 1001G	KBJ 1002	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	Unit
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.2							$^\circ C/W$
Operating Temperature Range	T_A	-55 to +125							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							
Case Style		KBJ							

Note: 1. Device mounted on 100mm * 100mm * 1.6mm Cu Plate Heatsink.

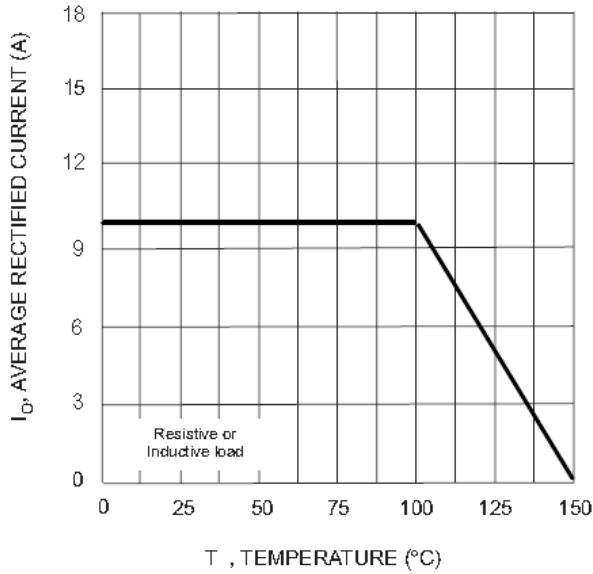


Fig. 1 Forward Current Derating Curve

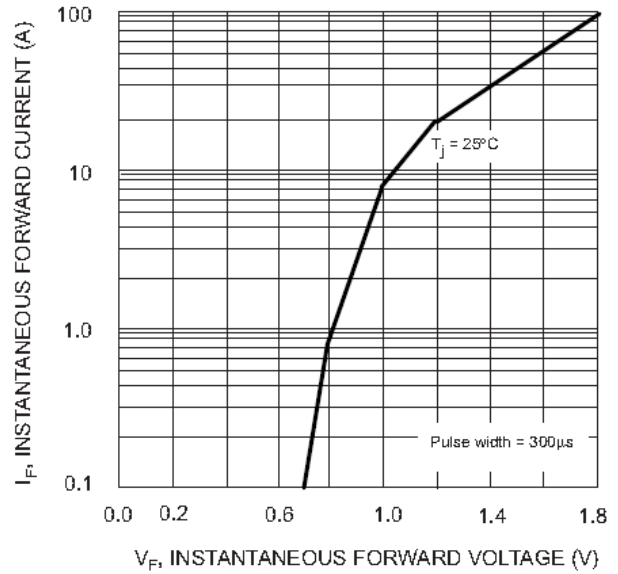


Fig. 2 Typical Fwd Characteristics, per element

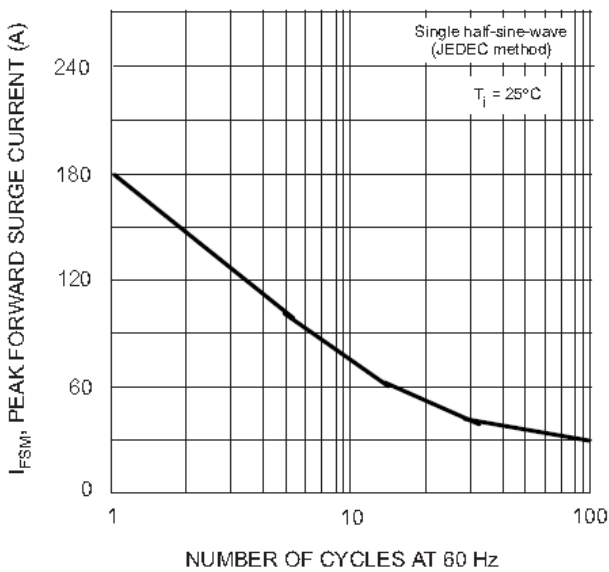


Fig. 3 Maximum Non-Repetitive Surge Current

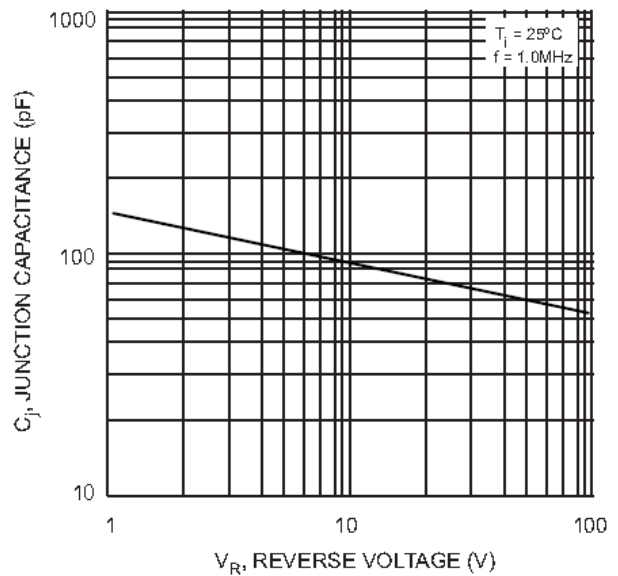


Fig. 4 Typical Junction Capacitance



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