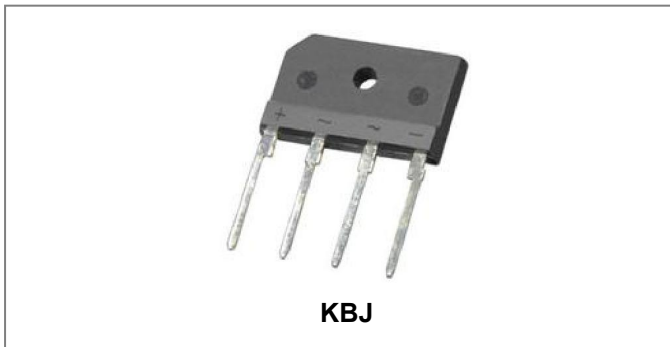


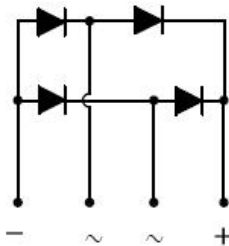
KBJ10005 THRU KBJ1010 GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER



Features

- Glass passivated chip junction KBJ
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



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

Maximum Ratings: @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	KBJ 10005	KBJ 1001	KBJ 1002	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average forward rectified output current @ $T_C=55^{\circ}\text{C}$	I_o	10							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: @T_A=25°C unless otherwise specified

Type Number	Symbol	KBJ 10005	KBJ 1001	KBJ 1002	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	Units
Forward Voltage (per element)* @I _F =5A	V _F	1.1							V
Peak Reverse Current* @T _A = 25°C At Rated DC Blocking Voltage* @T _A = 125°C	I _{RM}	10 500							μA

* Pulse width < 300 μs, duty cycle < 2%

Thermal-Mechanical Specifications: @T_A=25°C unless otherwise specified

Type Number	Symbol	KBJ 10005	KBJ 1001	KBJ 1002	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	Units
Typical Thermal Resistance(Note 1)	R _{θJC}	1.2							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

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

Ratings and Characteristics Curves

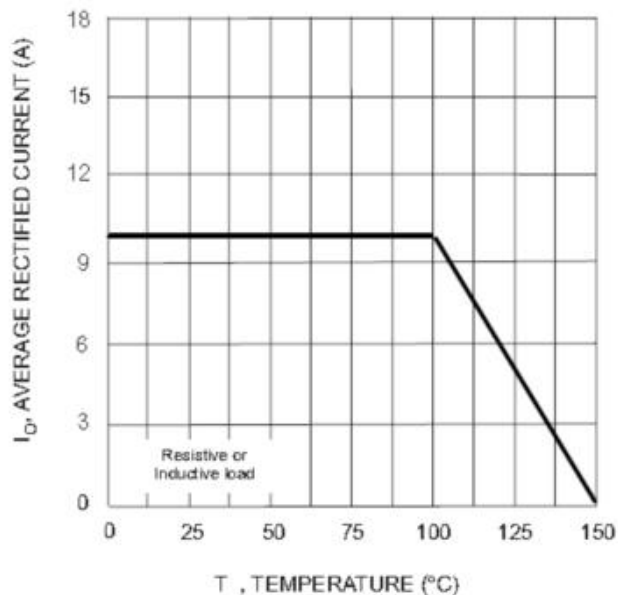


Fig. 1 Forward Current Derating Curve

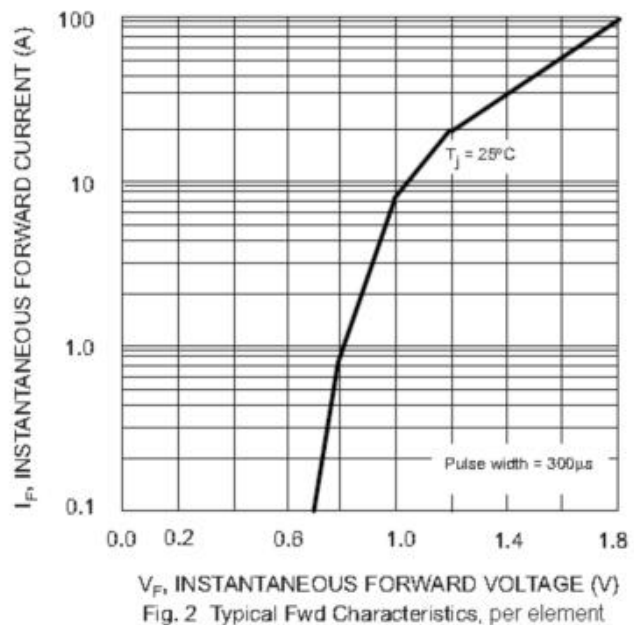


Fig. 2 Typical Fwd Characteristics, per element

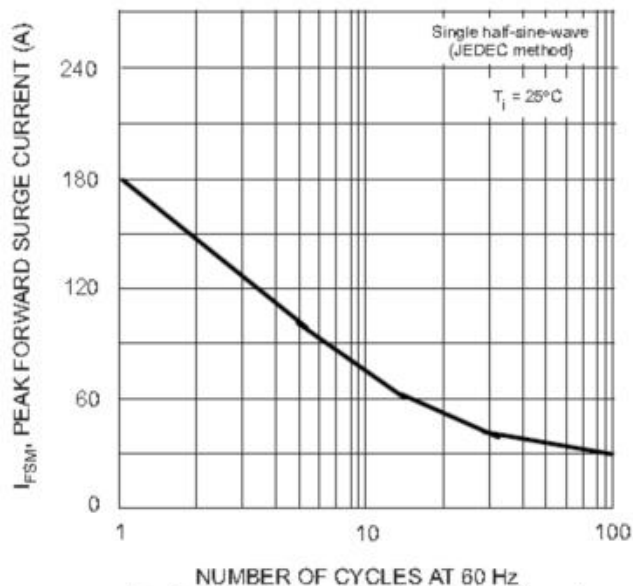


Fig. 3 Maximum Non-Repetitive Surge Current

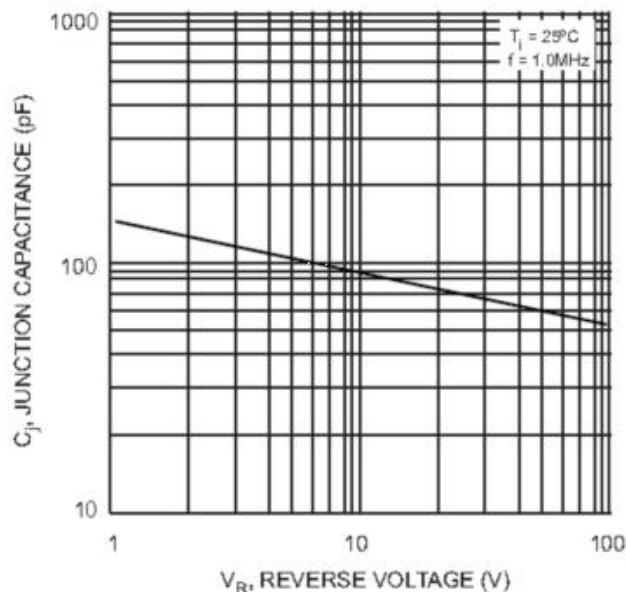


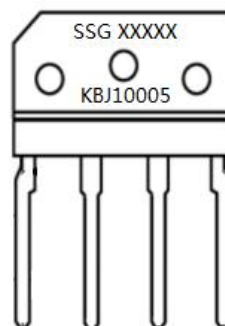
Fig. 4 Typical Junction Capacitance

Ordering Information

Device	Package	Plating	Shipping
KBJ10005 THRU KBJ1010	KBJ (Pb-Free)	Pure Sn	250pcs / box

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

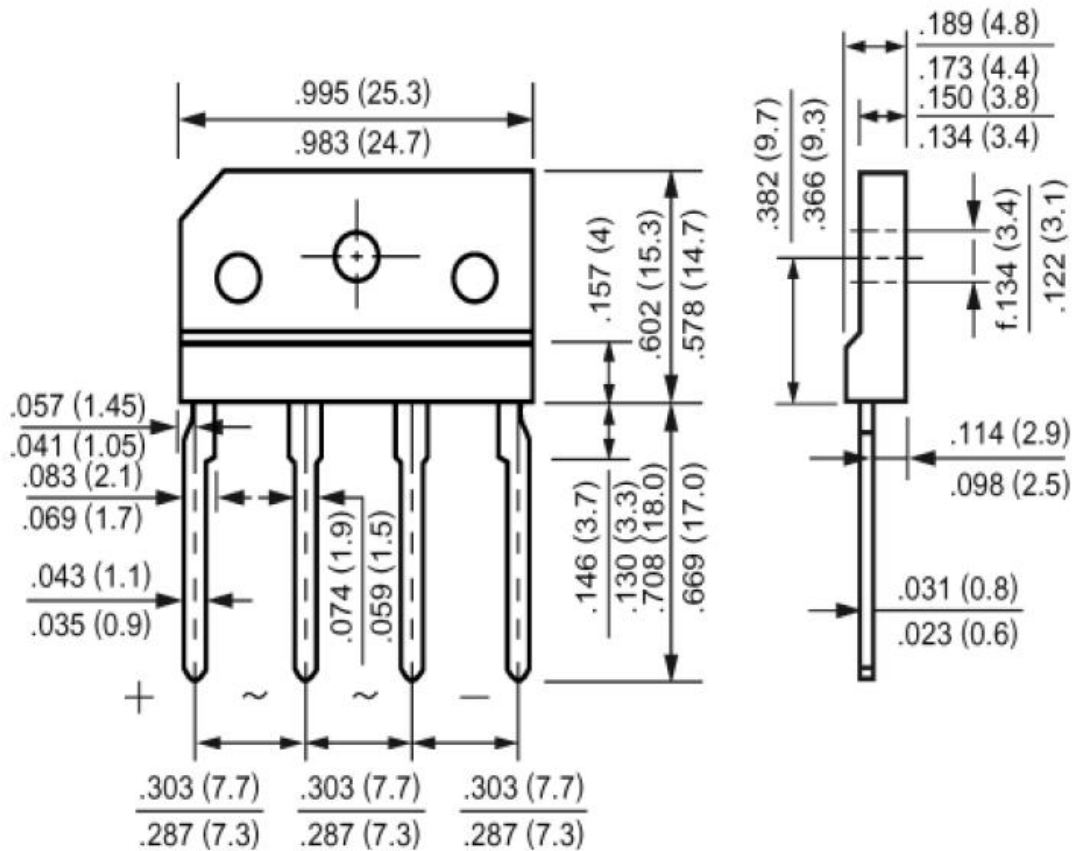


Where XXXXX is YYWWL

SSG = SSG
YY = Year
WW = Week
L = Lot Number
KBJ10005 = Type Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Mechanical Dimensions KBJ (Inches/Millimeters)



**Technical Data
Data Sheet N1831, Rev. A**



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