



DATA SHEET

KBJ1000~KBJ1010

SILICON BRIDGE RECTIFIERS

VOLTAGE - 50 to 1000 Volts CURRENT - 10.0 Amperes

FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- 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
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Leads solderable per MIL-STD-750,

Method 2026

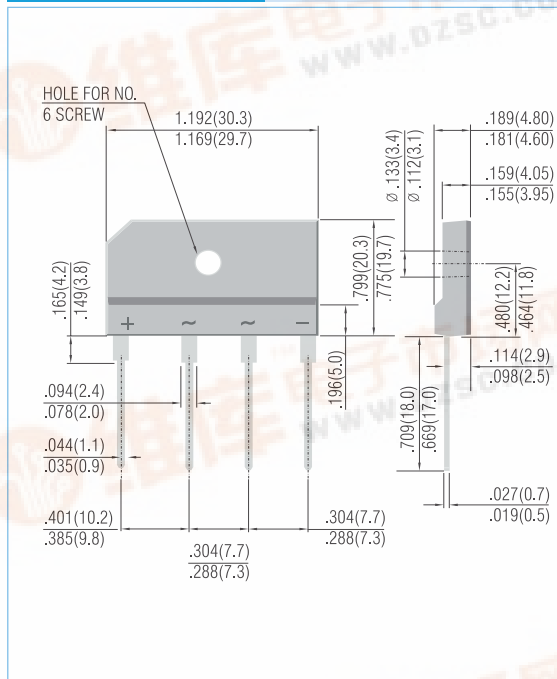
Mounting position: Any

Mounting torque: 20 in. lb. Max.

Weight: 7.056g

KBJ

Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

For Capacitive load derate current by 20%.

PARAMETER	SYMBOL	KBJ 1000	KBJ 1001	KBJ 1002	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	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 Current for Resistive Load at $T_c = 55^\circ\text{C}$	I_{AV}	10							A
Non-repetitive Peak Forward Surge Current at Rated Load	I_{FSM}	180							A
Maximum Forward Voltage per Bridge Element at 10A Specified Current	V_F	1.1							V
Maximum Reverse Leakage Current at Raed @ $T_A = 25^\circ\text{C}$	I_R	10.0							μA
Typical Thermal Resistance per leg (Note) R_{QJC}	R_{QJC}	1.2							$^\circ\text{C} / \text{W}$
Operating Temperature Range	T_A	-50 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-50 to + 150							$^\circ\text{C}$

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

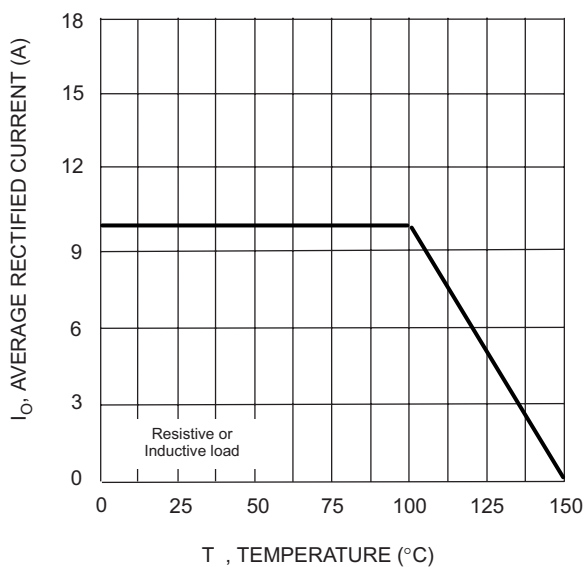


Fig. 1 Forward Current Derating Curve

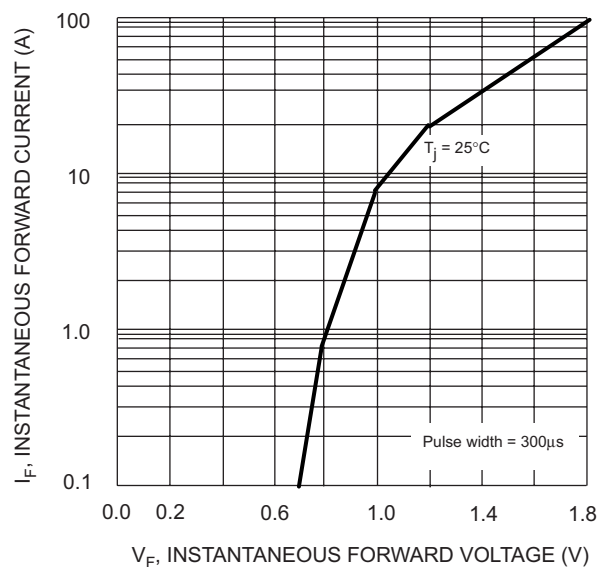


Fig. 2 Typical Fwd Characteristics, per element

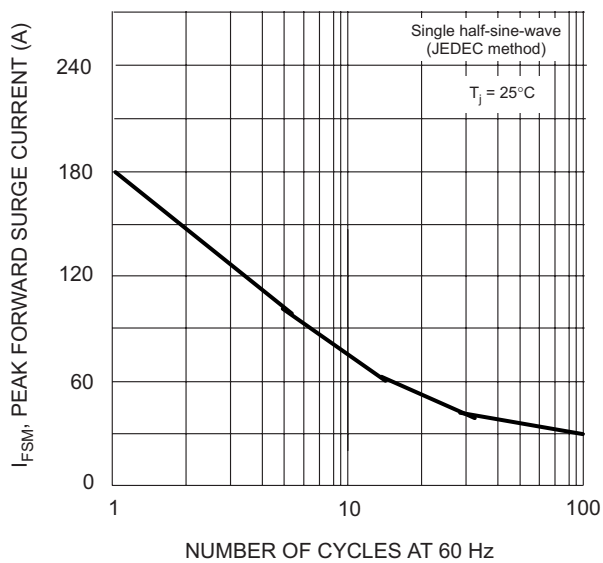


Fig. 3 Maximum Non-Repetitive Surge Current

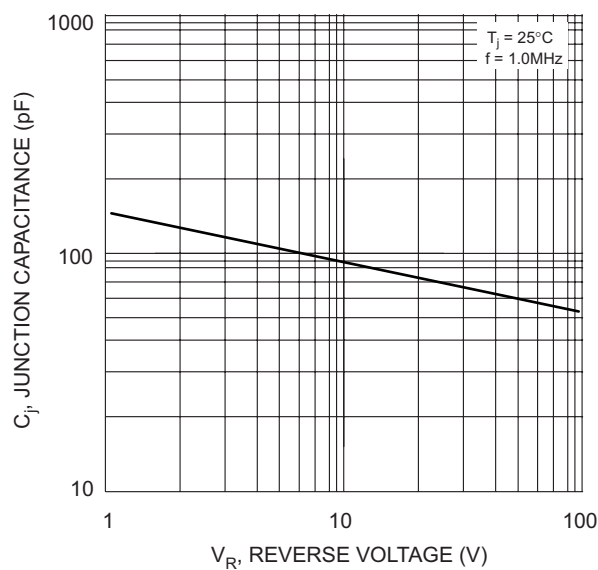


Fig. 4 Typical Junction Capacitance