



# DATA SHEET

## KBJ1000~KBJ1010

### SILICON BRIDGE RECTIFIERS

**VOLTAGE - 50 to 1000 Volts CURRENT - 10.0 Amperes**

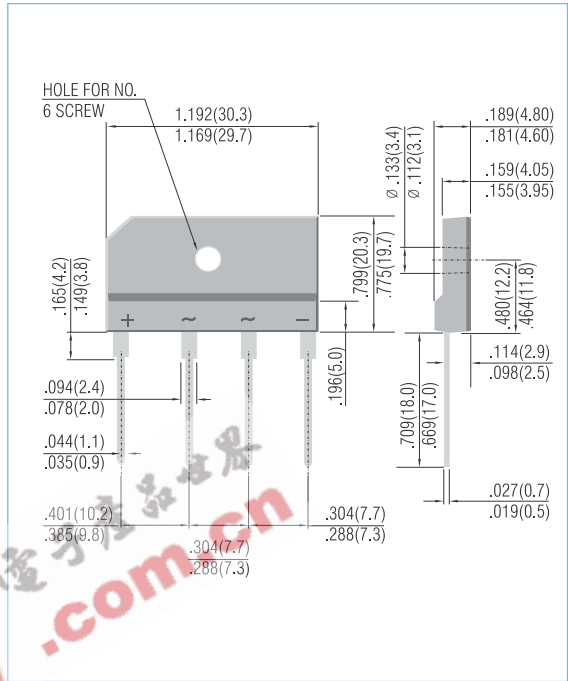
#### FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-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
- 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 $T_c = 55^\circ C$	$I_{AV}$	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 @ $T_A = 25^\circ C$	$I_R$	10.0							$\mu A$
Typical Thermal Resistance per leg (Note) $R_{QJC}$	$R_{QJC}$	1.2							$^\circ C / W$
Operating Temperature Range	$T_A$	-50 to +125							$^\circ C$
Storage Temperature Range	$T_{STG}$	-50 to + 150							$^\circ C$

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

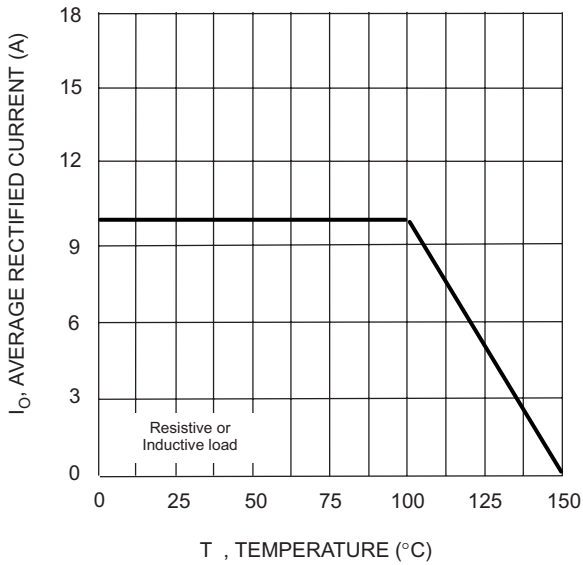


Fig. 1 Forward Current Derating Curve

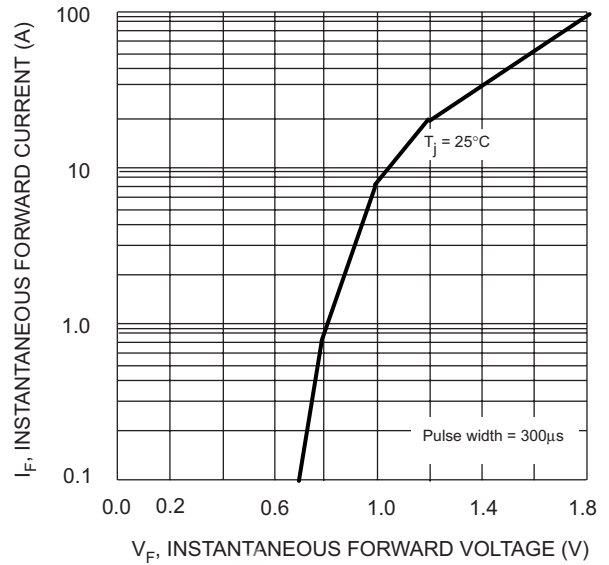


Fig. 2 Typical Fwd Characteristics, per element

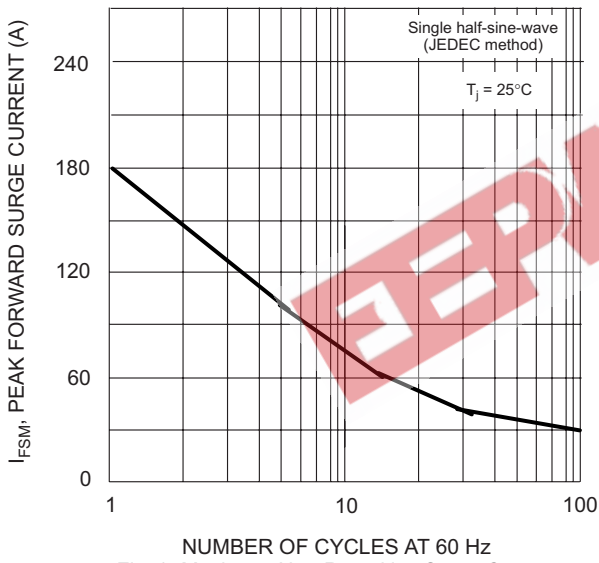


Fig. 3 Maximum Non-Repetitive Surge Current

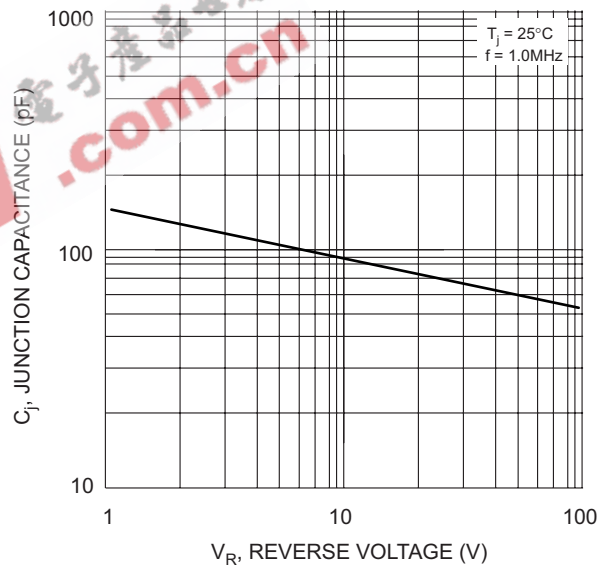


Fig. 4 Typical Junction Capacitance