

Features

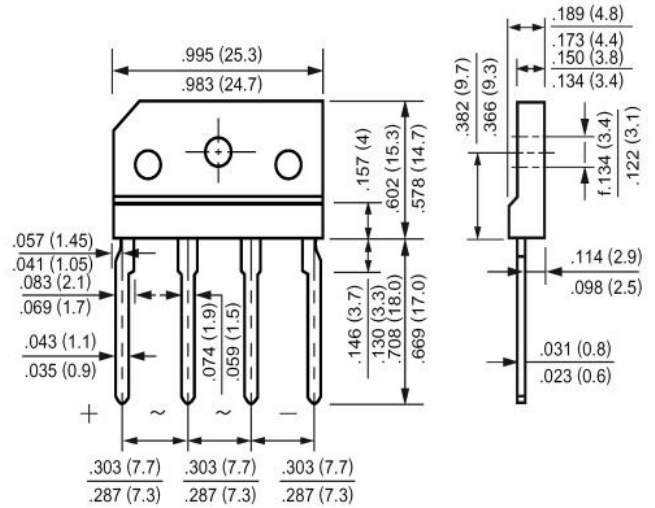
- Glass passivated die construction
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

Mechanical Data

Case: KBJ4 molded plastic

Terminals: plated leads solderable per MIL-STD-202, Method 208

Mounting Position: Any



Dimensions in inches and (millimeters)

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, derate current by 20%

PARAMETER	SYMBOL	KBJ 8A	KBJ 8B	KBJ 8D	KBJ 8G	KBJ 8J	KBJ 8K	KBJ 8M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	10	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @ $T_C=100^\circ C$	$I_{F(AV)}$	8.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JED EC method)	I_{FSM}	200							A
Maximum Forward Voltage at 4.0ADC	V_F	1.0							V
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=100^\circ C$	I_R	5.0 500							μA
Typical Junction Capacitance (Note 1)	C_j	225				125			P^F
Typical Thermal Resistance(Note 2)	R_{QJC}	2.2							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ C$

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Case with Device Mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – Derating Curve Output Rectified Current

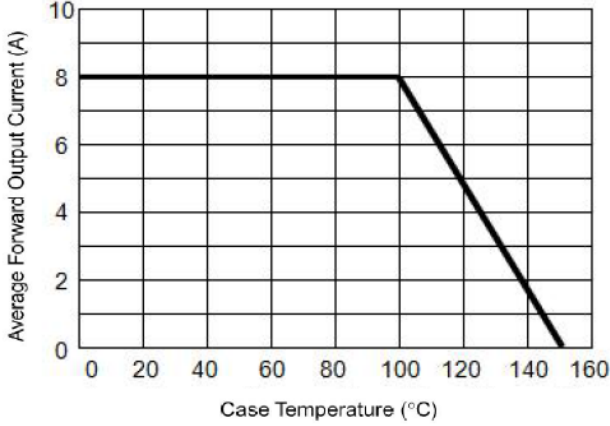


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

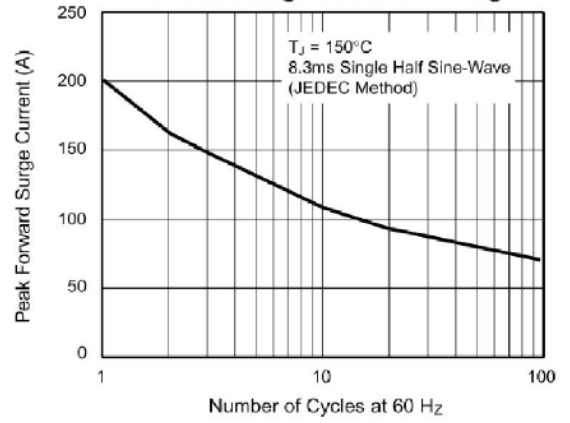


Fig. 3 – Typical Forward Characteristics Per Leg

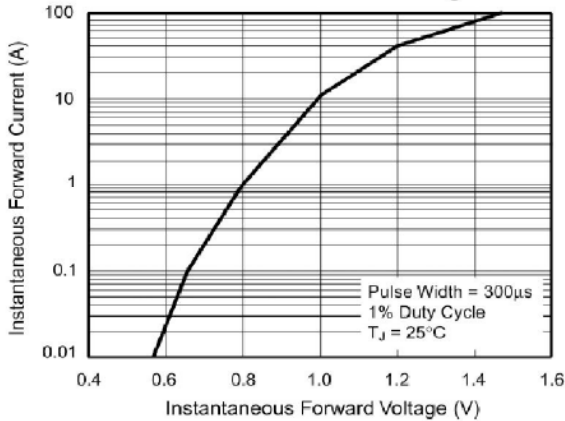


Fig. 4 – Typical Reverse Characteristics Per Leg

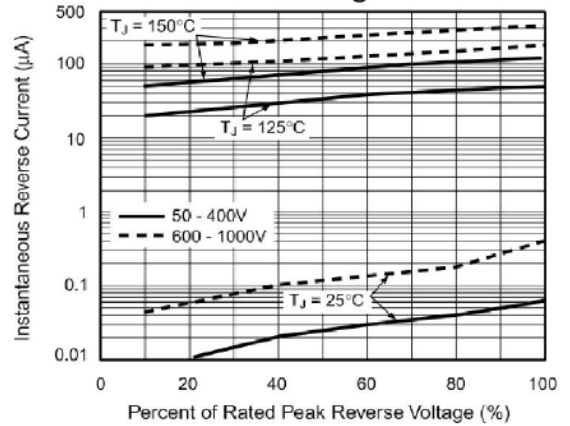


Fig. 5 – Typical Junction Capacitance Per Leg

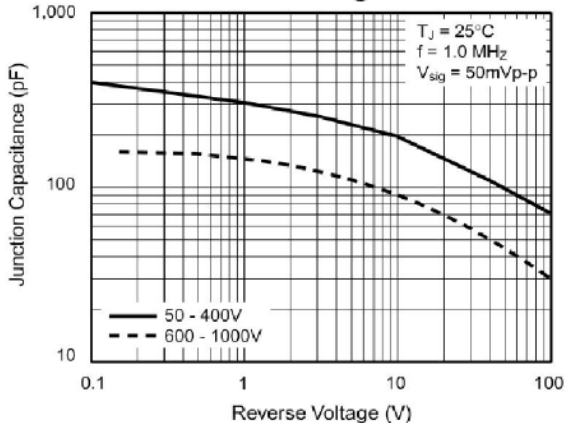


Fig. 6 – Typical Transient Thermal Impedance Per Leg

