



KBJ4005 THRU KBJ410

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIERS

REVERSE VOLTAGE: 50 to 1000 VOLTS
FORWARD CURRENT: 4.0 AMPERE

FEATURES

- Glass passivated chip junction
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Reliable low cost construction utilizing molded plastic technique

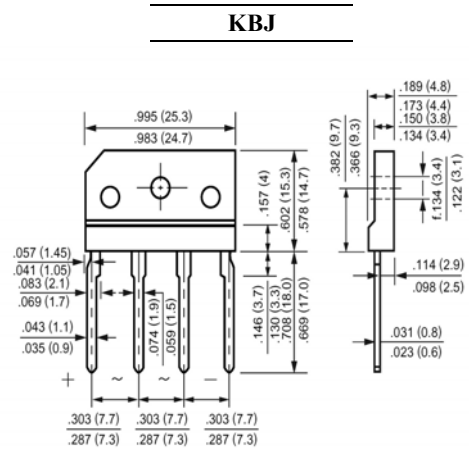
MECHANICAL DATA

Case : Molded plastic, KBJ

Epoxy : UL 94V-O rate flame retardant

Terminals : Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position : Any



Dimensions in inchs and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbols	KBJ4005	KBJ401	KBJ402	KBJ404	KBJ406	KBJ408	KBJ410	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_C=100^\circ\text{C}$ with heatsink	$I_{(AV)}$	4.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120.0							Amp
Maximum Forward Voltage at 2.0A DC and 25°C	V_F	1.00							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	5.0 500							μAmp
Typical Junction Capacitance (Note 1)	C_J	40							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	5.5							°C/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							°C

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance from Junction to Case with Device Mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.



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RATINGS AND CHARACTERISTIC CURVES

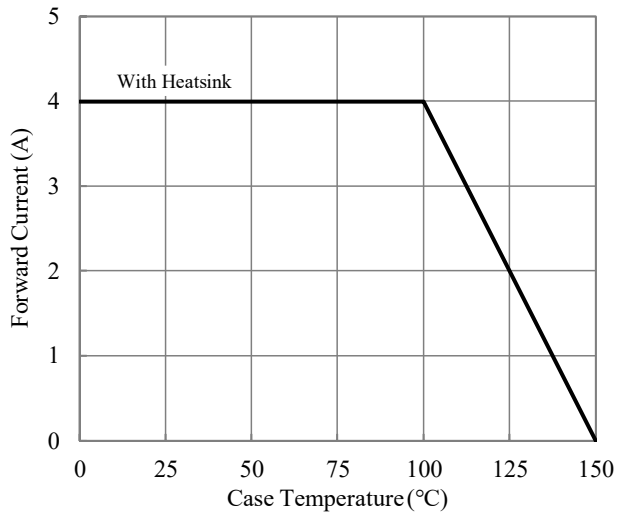


Fig. 1 Forward Current Derating Curve

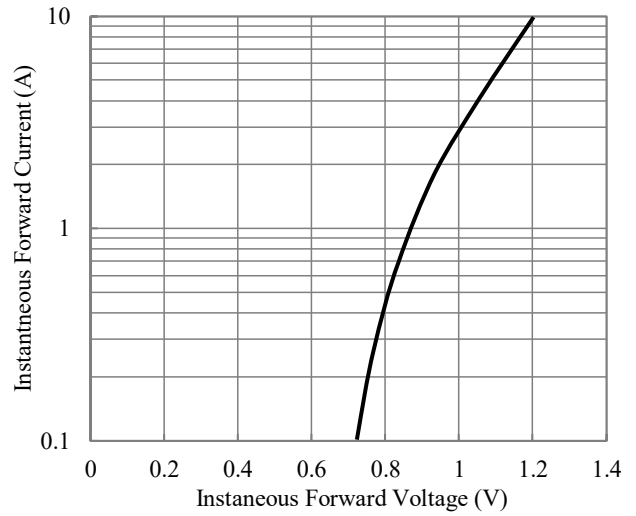


Fig. 2 Typical Instantaneous Forward Characteristics

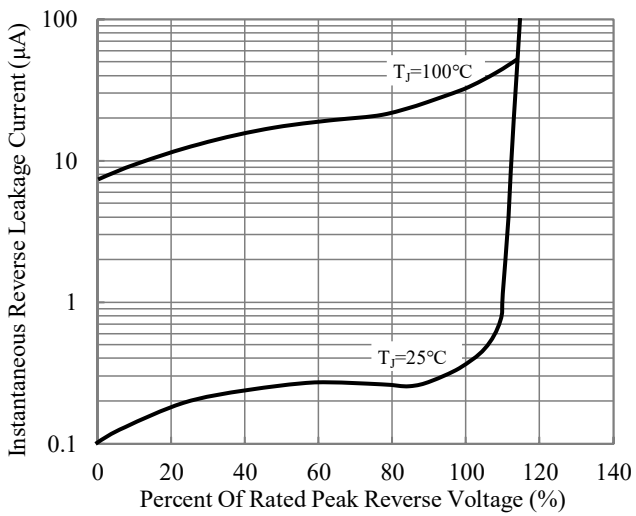


Fig. 3 Typical Reverse Leakage Characteristics

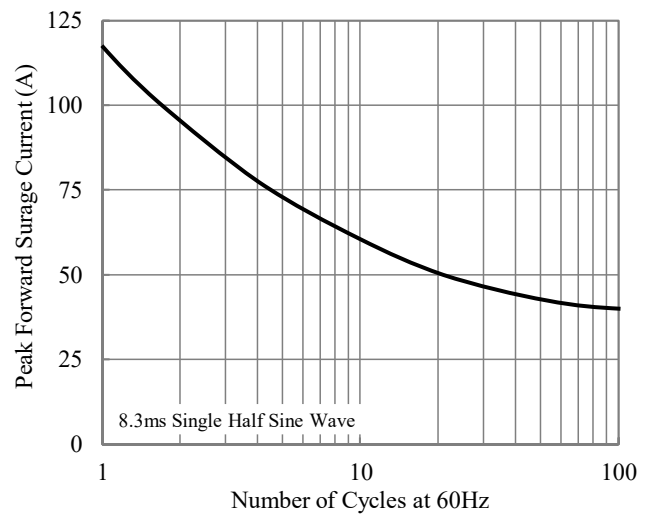


Fig. 4 Maximum Non-Repetitive Peak Forward Surge Current