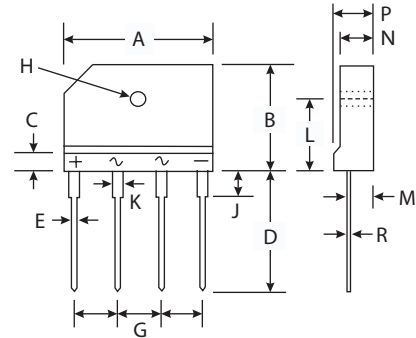


KBJ6A THRU KBJ6M

CURRENT 6.0 Amperes
VOLTAGE 50 to 1000 Volts

Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V_{RMS}
- Low Reverse Leakage Current
- Surge Overload Rating to 170A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0



Mechanical Data

- Case : Molded Plastic
- Terminals : Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity : Molded on Body
- Mounting : Through Hole for #6 Screw
- Mounting Torque : 5.0 in-lbs Maximum
- Weight : 6.6 grams (approx.)
- Marking : Type Number

KBJ					
Dim	Min	Max	Dim	Min	Max
A	24.80	25.20	J	3.30	3.70
B	14.70	15.30	K	1.50	1.90
C	4.00 Nominal		L	9.30	9.70
D	17.20	17.80	M	2.50	2.90
E	0.90	1.10	N	3.40	3.80
G	7.30	7.70	P	4.40	4.80
H	3.10 ϕ	3.40 ϕ	R	0.60	0.80

All Dimensions in mm

Maximum Ratings And Electrical Characteristics

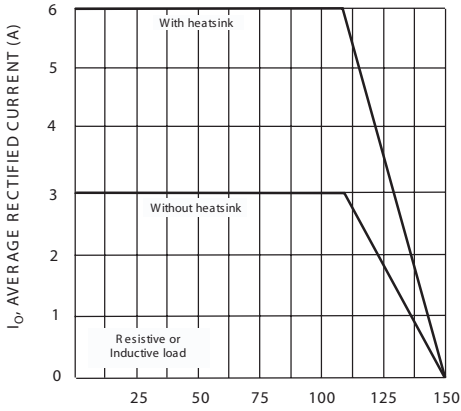
(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	KBJ 6A	KBJ 6B	KBJ 6D	KBJ 6G	KBJ 6J	KBJ 6K	KBJ 6M	Units
Peak Repetitive Reverse voltage	V_{RMM}								
Working Peak Reverse voltage	V_{RWM}	50	100	200	400	600	800	1000	Volts
DC Blocking voltage	V_R								
RMS Reverse voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts
Average Rectified Output Current @ $T_c=110^\circ\text{C}$	I_o	6							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	170							Amps
Forward Voltage per element @ $I_F=3.0\text{ A}$	V_{FM}	1.0							Volts
Peak Reverse Current at Rated DC Blocking voltage	@ $T_c=25^\circ\text{C}$	5.0							μA
	@ $T_c=125^\circ\text{C}$	500							
I^2t Rating for Fusing ($t < 8.3\text{ms}$) (Note 1)	I^2t	120							A^2s
Typical Junction Capacitance per element (Note 2)	C_j	80							pF
Typical Thermal Resistance, Junction to Case (Note 3)	$R_{\theta JA}$	6.0							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j T_{STG}	-65 to +150							$^\circ\text{C}$

Notes:

- (1) Non-repetitive, for $t > 1.0\text{ms}$ and $< 8.3\text{ms}$.
- (2) Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
- (3) Thermal Resistance from junction to case per element. Unit mounted on 75 x 75 x 1.6mm copper plate heat sink.

RATINGS AND CHARACTERISTIC CURVES KBJ6A THRU KBJ6M



T_c , CASE TEMPERATURE ($^{\circ}\text{C}$)
Fig. 1 Forward Current Derating Curve

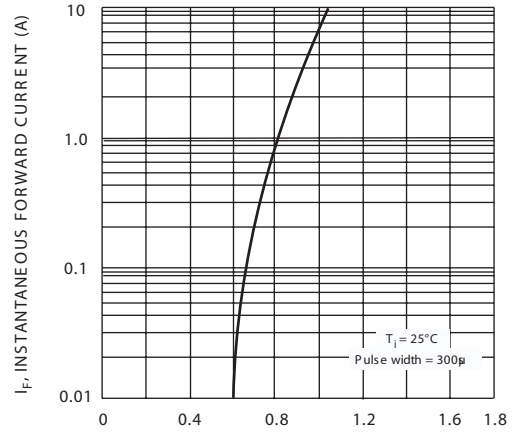
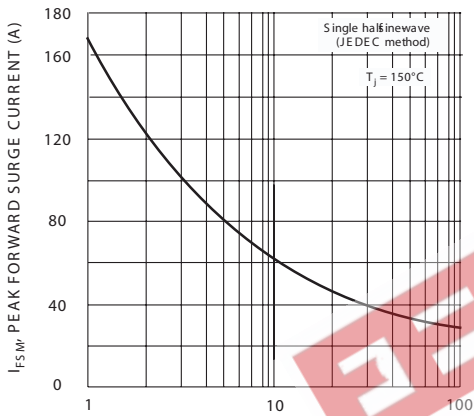


Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Maximum NonRepetitive Surge Current

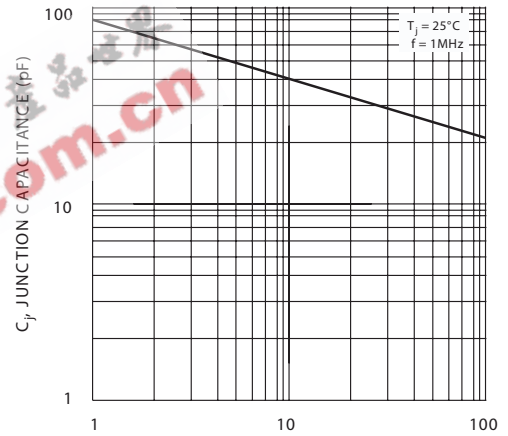
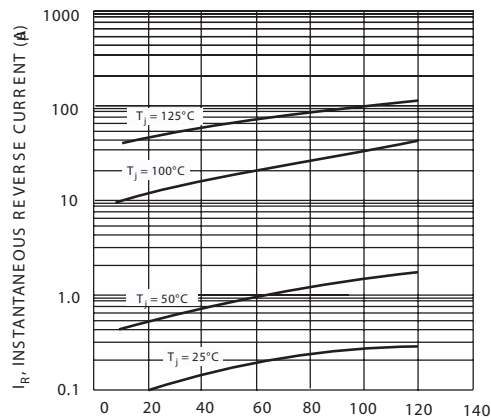


Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typical Reverse Characteristics