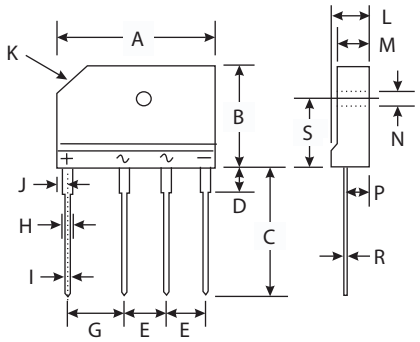
KBJ10A THRU KBJ10M

CURRENT 10.0 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	29.70	30.30	J	2.30	2.70
B	19.70	20.30	K	3.0 X 45°	
C	17.00	18.00	L	4.40	4.80
D	3.80	4.20	M	3.40	3.80
E	7.30	7.70	N	3.10	3.40
G	9.80	10.20	P	2.50	2.90
H	2.00	2.40	R	0.60	0.80
I	0.90	1.10	S	10.80	11.20
All Dimensions in mm					

Maximum Ratings And Electrical Characteristics

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

	Symbols	KBJ 10A	KBJ 10B	KBJ 10D	KBJ 10G	KBJ 10J	KBJ 10K	KBJ 10M	Units
Peak Repetitive Reverse voltage Working Peak Reverse voltage DC Blocking voltage	V_{RMM} V_{RWM} V_R	50	100	200	400	600	800	1000	Volts
RMS Reverse voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts
Average Rectified Output Current @ T_C=110℃	Io	10							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=5.0 A	V_{FM}	1.05							Volts
Peak Reverse Current at Rated DC Blocking voltage @ T_C=25℃	I_R	10							μA
Peak Reverse Current at Rated DC Blocking voltage @ T_C=125℃	I_R	500							μA
I^2t Rating for Fusing (t<8.3ms) (Note 1)	I^2t	120							A^2S
Typical Junction Capacitance per element (Note 2)	C_j	55							pF
Typical Thermal Resistance, Junction to Case (Note 3)	$R\Theta_{JA}$	4.0							℃/W
Operating and Storage Temperature Range	T_j T_{STG}	-65 to +150							℃

Notes:
(1) Non-repetitive, for t > 1.0ms and < 8.3ms.
(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 150 x 150 x 1.6mm copper plate heat sink.

RATINGS AND CHARACTERISTIC CURVES KBJ10A THRU KBJ10M

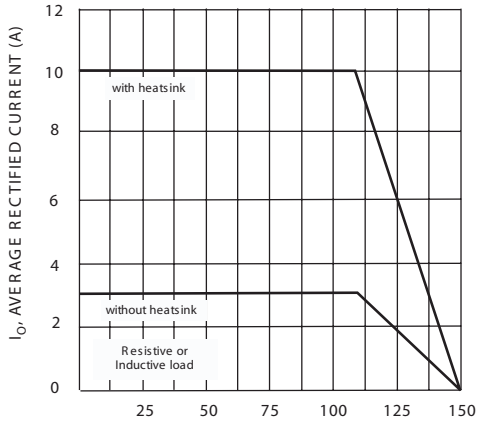


Fig. 1 Forward Current Derating Curve

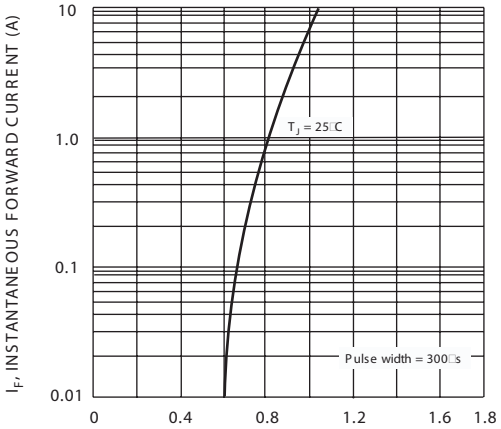


Fig. 2 Typical Forward Characteristics (per element)

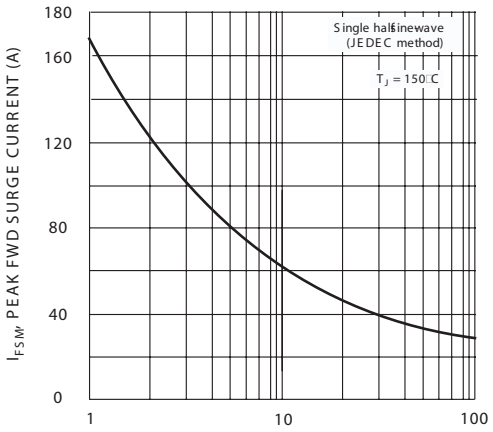


Fig. 3 Maximum Non-Repetitive Surge Current

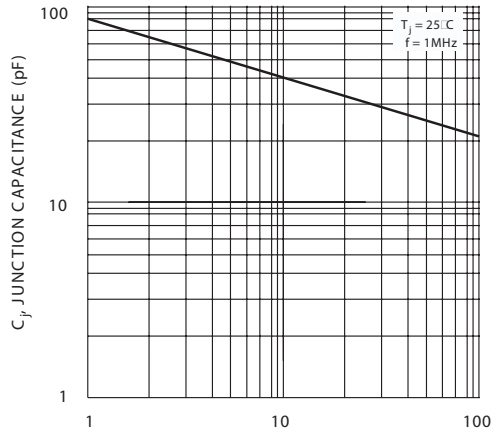


Fig. 4 Typical Junction Capacitance

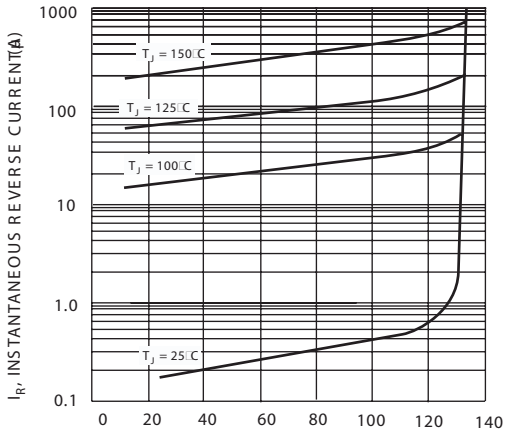


Fig. 5 Typical Reverse Characteristics