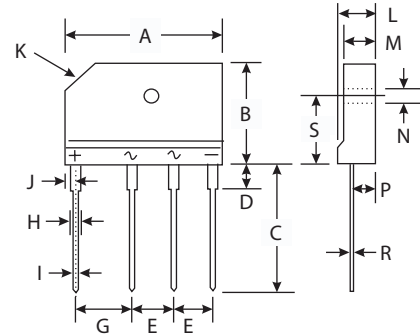


## KBJ15A THRU KBJ15M

CURRENT 15.0 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V<sub>RMS</sub>
- Low Reverse Leakage Current
- Surge Overload Rating to 240A 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°C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	KBJ 15A	KBJ 15B	KBJ 15D	KBJ 15G	KBJ 15J	KBJ 15K	KBJ 15M	Units
Peak Repetitive Reverse voltage Working Peak Reverse voltage DC Blocking voltage	V <sub>RMM</sub> V <sub>VRM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	Volts
RMS Reverse voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	Volts
Average Rectified Output Current @ T <sub>C</sub> =100°C	I <sub>o</sub>	15							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	240							Amps
Forward Voltage per element @ I <sub>F</sub> =7.5A DC	V <sub>FM</sub>	1.05							Volts
Peak Reverse Current at Rated DC Blocking voltage	@ T <sub>C</sub> =25°C	10							μ A
	@ T <sub>C</sub> =125°C	500							
I <sup>2</sup> t Rating for Fusing (t<8.3ms) (Note 1)	I <sup>2</sup> t	240							A <sup>2</sup> s
Typical Junction Capacitance per element (Note 2)	C <sub>j</sub>	60							pF
Typical Thermal Resistance, Junction to Case (Note 3)	R <sub>θ JA</sub>	2.7							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> T <sub>STG</sub>	-65 to +150							°C

#### 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 300 x 300 x 1.6mm copper plate heat sink.



# RATINGS AND CHARACTERISTIC CURVES KBJ15A THRU KBJ15M

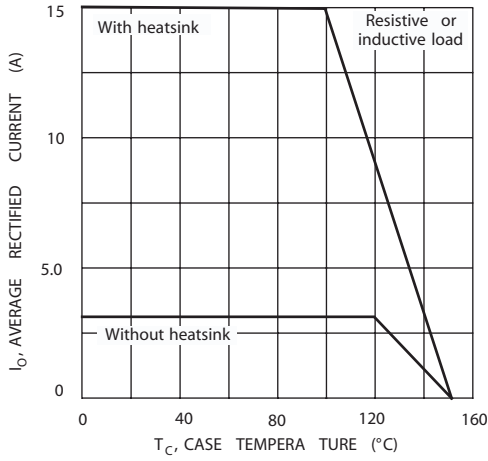


Fig. 1 Forward Current Derating Curve

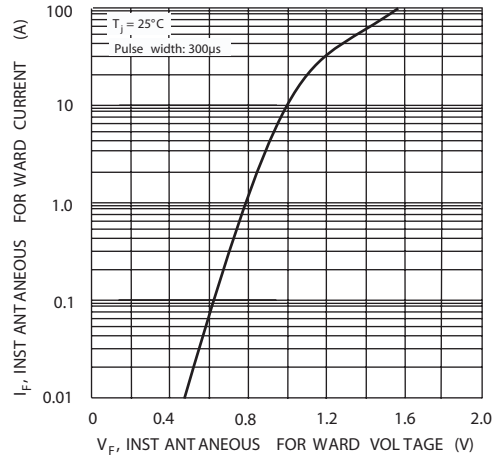


Fig. 2 Typical Forward Characteristics

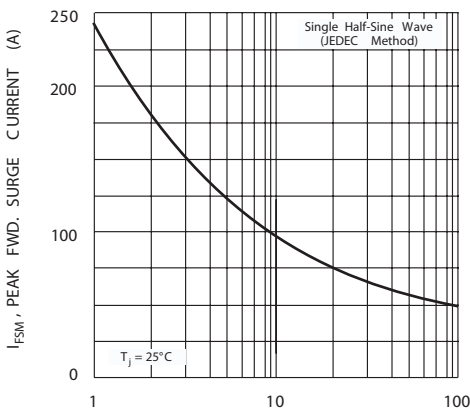


Fig. 3 Maximum Non-Repetitive Surge Current

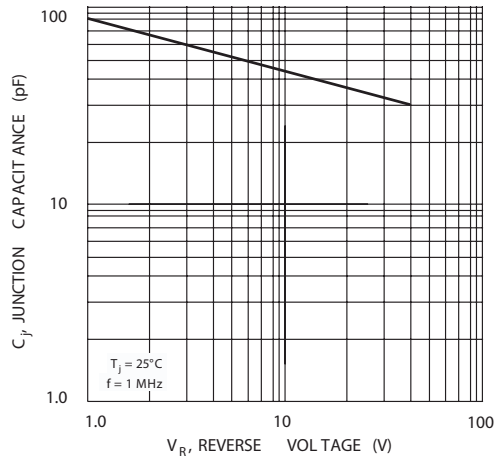


Fig. 4 Typical Junction Capacitance

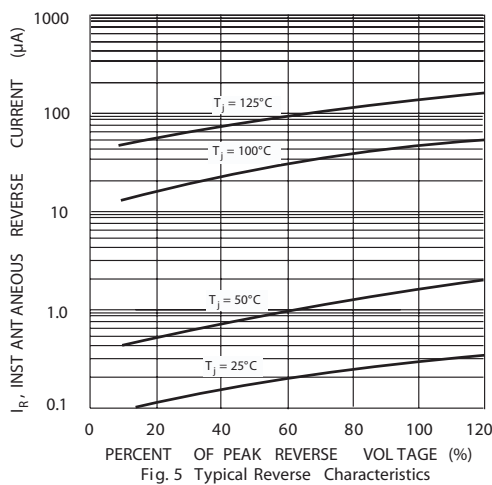


Fig. 5 Typical Reverse Characteristics