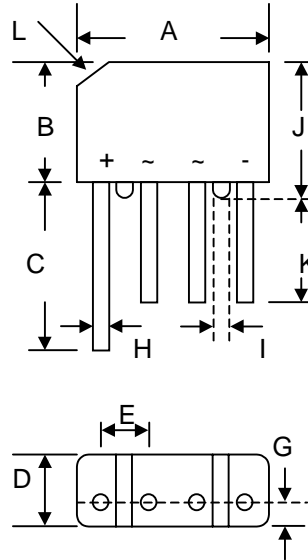


### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- UL Recognized File # E157705

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



KBP		
Dim	Min	Max
A	14.22	15.24
B	10.67	11.68
C	15.2	—
D	4.57	5.08
E	3.60	4.10
G	2.16	2.67
H	0.76	0.86
I	1.52	—
J	11.68	12.7
K	12.7	—
L	3.2 x 45° Typical	
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Characteristic	Symbol	KBP 150	KBP 151	KBP 152	KBP 154	KBP 156	KBP 158	KBP 1510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 50^\circ\text{C}$	$I_O$	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							A
Forward Voltage (per element) @ $I_F = 1.5\text{A}$	$V_{FM}$	1.3							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	10 500							$\mu\text{A}$
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	10							$\text{A}^2\text{s}$
Typical Junction Capacitance per element (Note 2)	$C_j$	15							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	28							K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150							$^\circ\text{C}$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 3. Thermal resistance junction to ambient mounted on PC board with 12mm<sup>2</sup> copper pad.

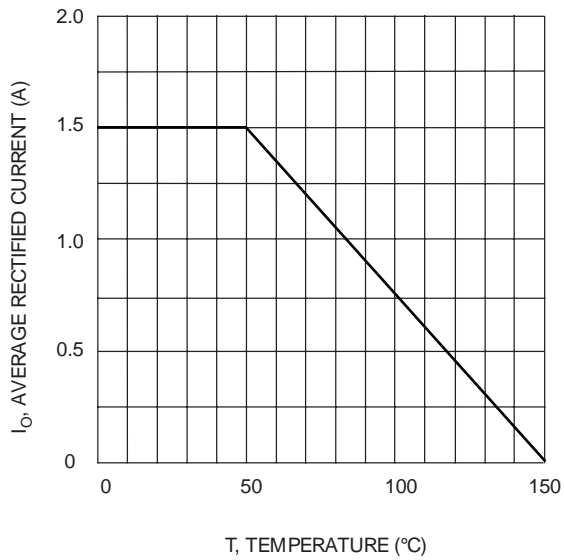


Fig. 1 Forward Current Derating Curve

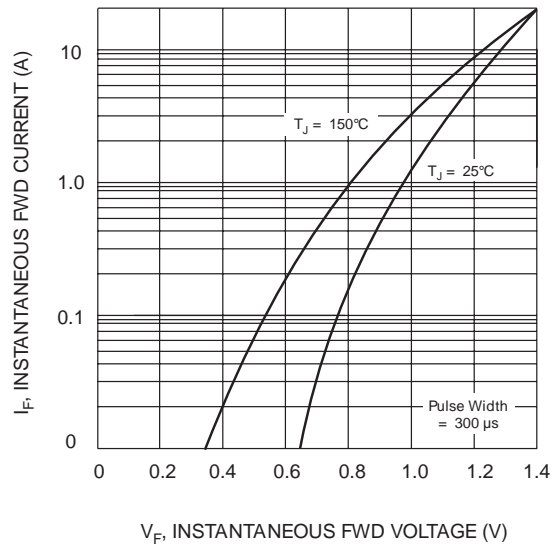


Fig. 2 Typical Fwd Characteristics

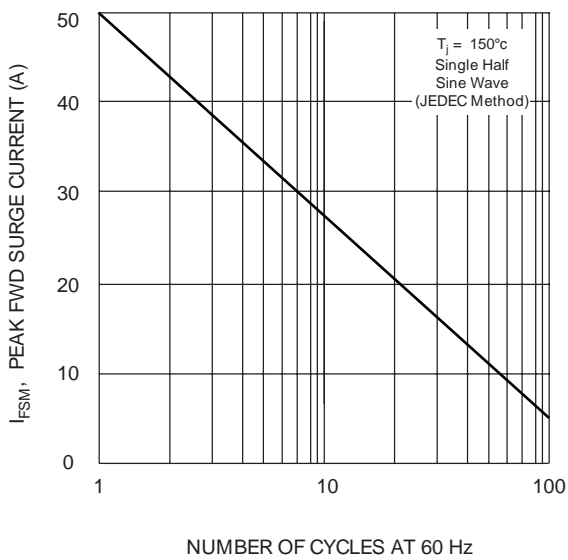


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

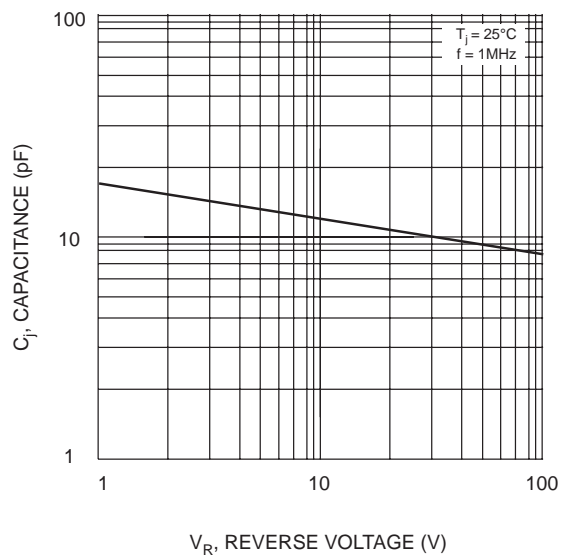


Fig. 4 Typical Junction Capacitance

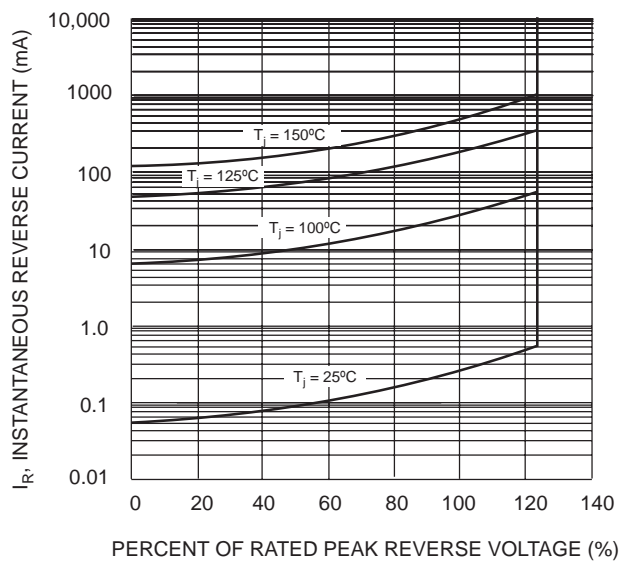


Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBP150	SIL Bridge	1000 Units/Box
KBP151	SIL Bridge	1000 Units/Box
KBP152	SIL Bridge	1000 Units/Box
KBP154	SIL Bridge	1000 Units/Box
KBP156	SIL Bridge	1000 Units/Box
KBP158	SIL Bridge	1000 Units/Box
KBP1510	SIL Bridge	1000 Units/Box

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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