Silicon Bridge Rectifiers

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KBP200 Thru 2010

Reverse Voltage: 50 - 1000 Volts
Forward Current: 2.0 Amp

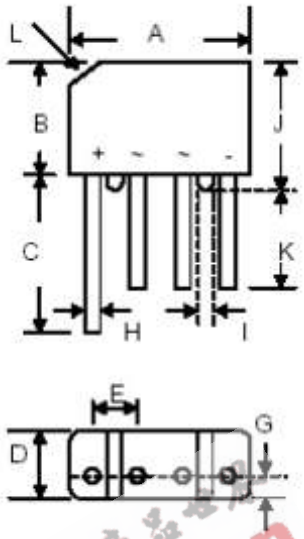
Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards

Mechanical Data

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

KBP



KBP		
Dim	**Min**	**Max**
A	14.22	15.24
B	10.67	11.68
C	15.20	-
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	12.70
K	12.70	-
L	3.2 X 45° Typical	
All Dimensions in mm		

Maximum Ratings and Electrical Characterics

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

CHARACTERISTICS	Symbol	KBP 200	KBP 201	KBP 202	KBP 204	KBP 206	KBP 208	KBP 2010	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 @ T_A = 50°C (Note 1)	I_O	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rate load (JEDEC Method)	I_{FSM}	60							A
Forward Voltage (per element) @I_F = 2.0A	V_{FM}	1.1							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	10 500							uA
Rating for Fusing (t<8.3ms)	I^2t	15							A^2S
Typical Junction Capacitance per element (Note 2)	Cj	25							pF
Typical Thermal Resistance (Note 3)	R_{JA}	30							K/W
Operating and Storage Temperature Range	Tj, T_{STG}	-55 to +160							°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^2 copper pad.

Rating and Characteristic Curves (KBP200 - KBP2010)

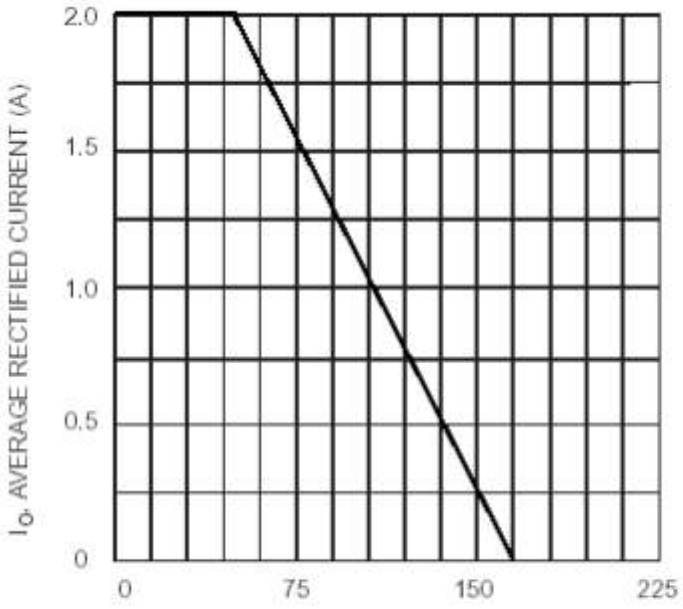


Fig. 1 Forward Current Derating Curve

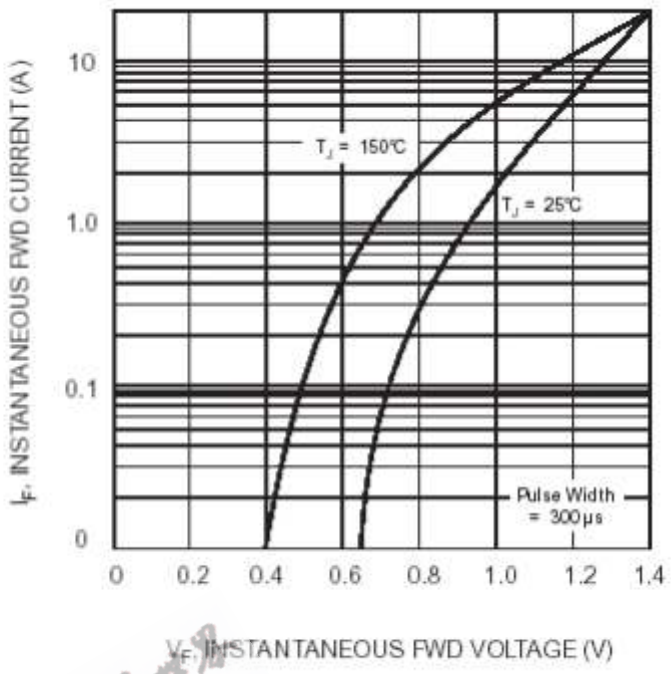


Fig. 2 Typical Fwd Characteristics

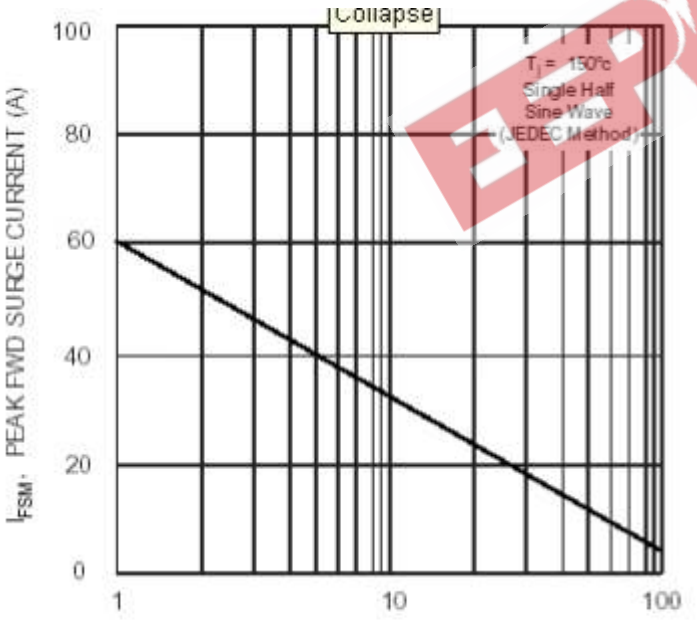


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

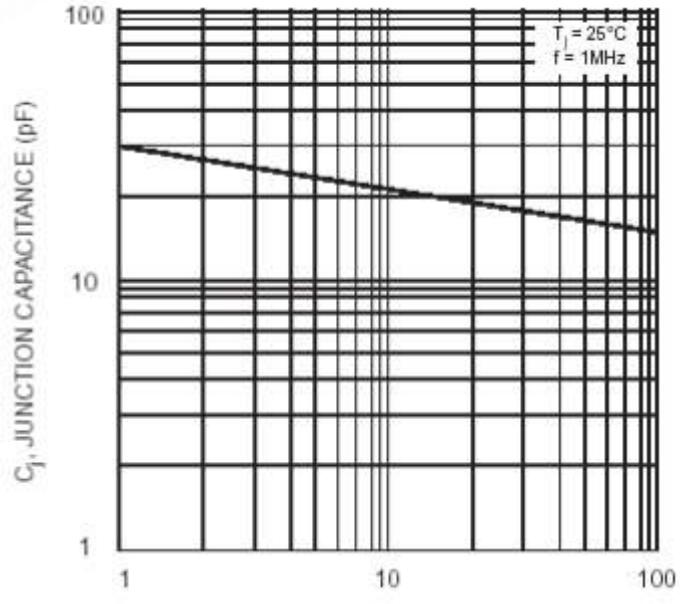


Fig. 4 Typical Junction Capacitance

Rating and Characteristic Curves (KBP200 - KBP2010)

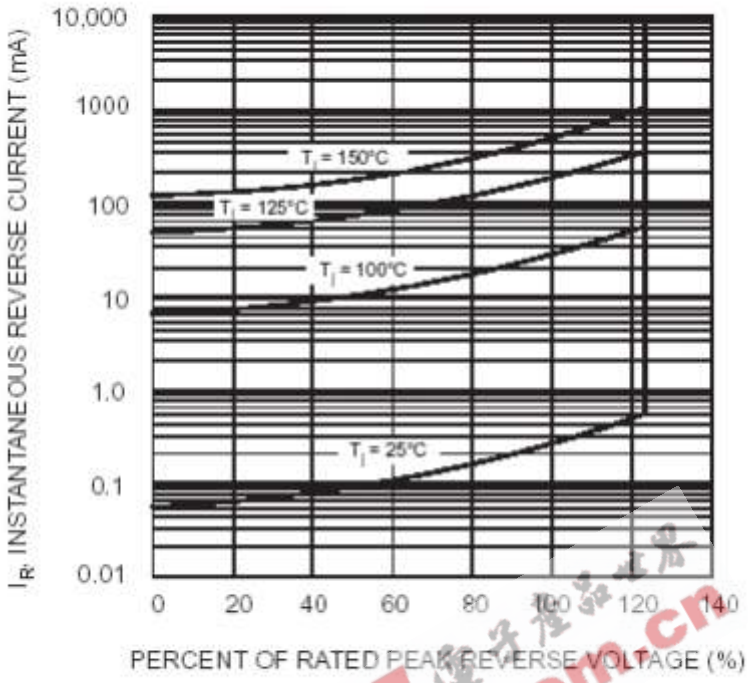


Fig. 5 Typical Reverse Characteristics