

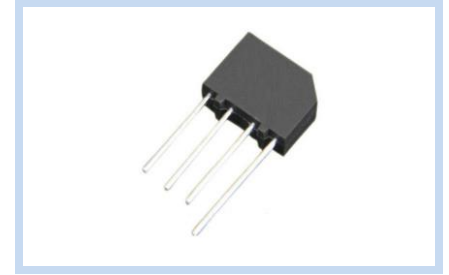
Single-Phase Bridge Rectifier 2.0A KBP Package

2KBP-M Series

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FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 2.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 60A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

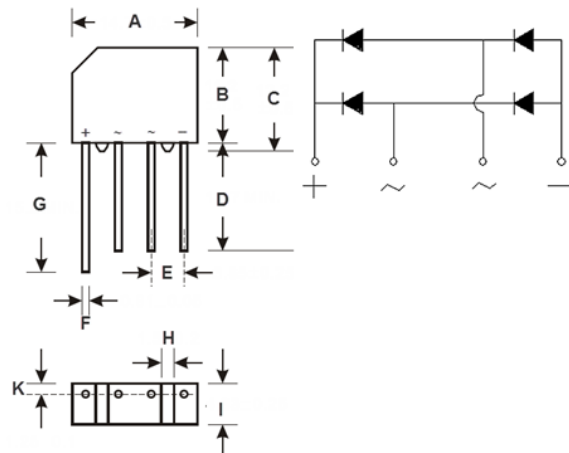


Parameter	Code	2KBP 005M	2KBP 01M	2KBP 02M	2KBP 04M	2KBP 06M	2KBP 08M	2KBP 10M	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	I_F	2.0, $T_A=25^\circ\text{C}$							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	15							A^2sec
Maximum Instantaneous Forward Voltage Drop per Diode	V_F	1.1, $I_F=2.0\text{A}$							V
Maximum DC Reverse Current at Rated DC blocking Voltage per Element	I_R	10, $T_A=25^\circ\text{C}$							μA
	I_R	500, $T_A=125^\circ\text{C}$							μA
Typical Junction Capacitance per Element	C_j	25.0							pF
Operating Junction and Storage Temperature	T_J, T_{STG}	-55~150							$^\circ\text{C}$
Typical Thermal Resistance per Element	$R_{\theta JA}$	10							$^\circ\text{C/W}$

- Note:**
1. Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate current by 20%.
 2. Thermal resistance from Junction to Ambient on P.C. board mounting.
 3. Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)
A	14.2	15.2
B	10.7	11.7
C	11.7	12.7
D	12.7	-
E	3.60	4.10
F	0.76	0.86
G	15.2	-
H	1.30	1.70
I	4.58	5.08
K	1.15	1.35



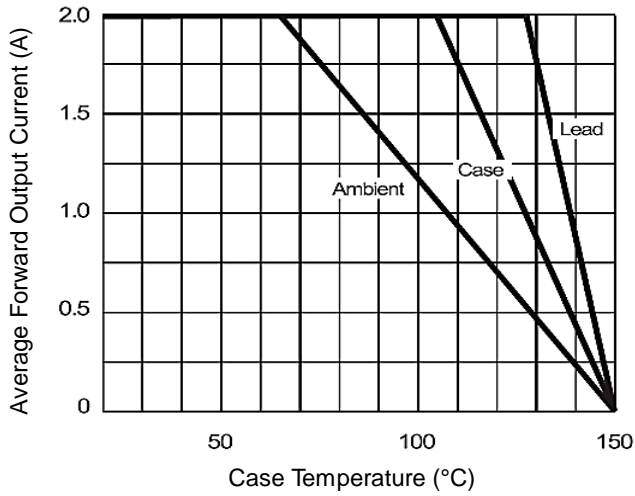
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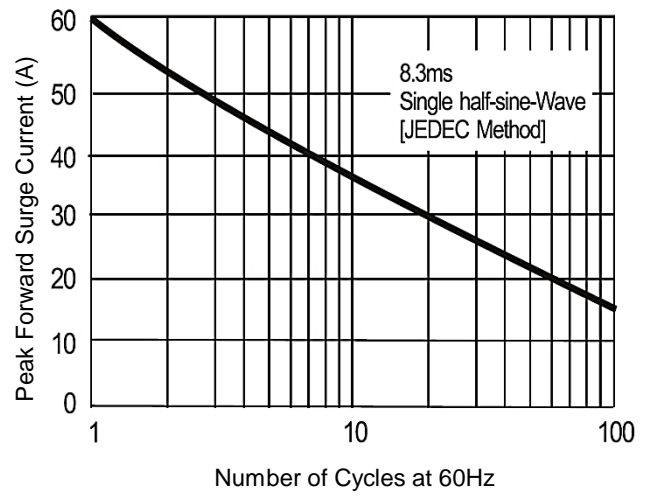
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RATING AND CHARACTERISTIC CURVES

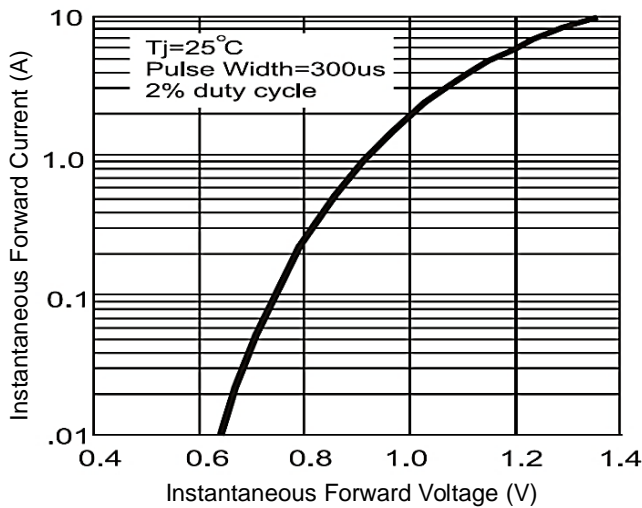
Derating Curve for Output Rectified Current



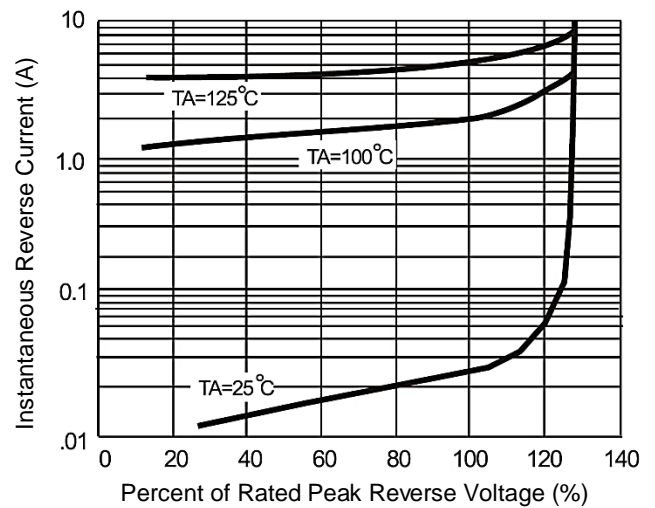
Maximum Non-Repetitive Peak Forward Surge Current



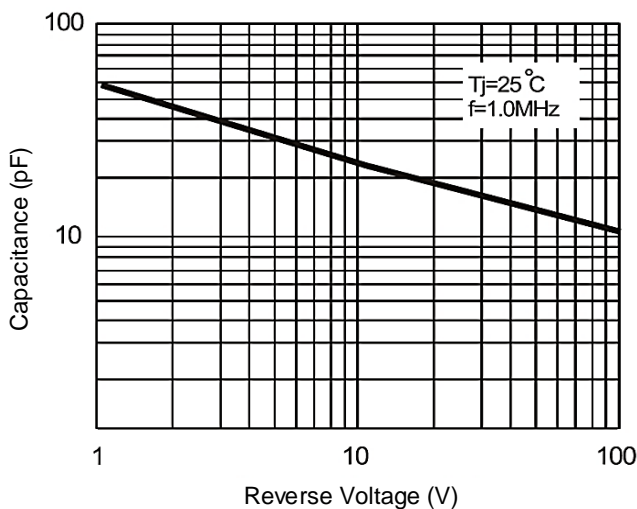
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



*Specifications subject to change without notice.