

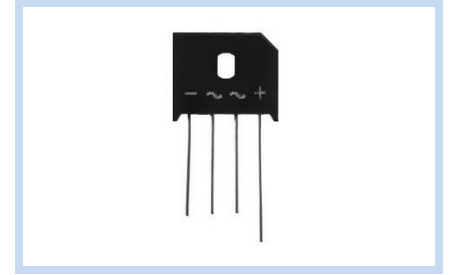
# Single-Phase Bridge Rectifier 6.0A KBU Package

KBU6A~KBU6M

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## FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 6.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 250A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



## MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

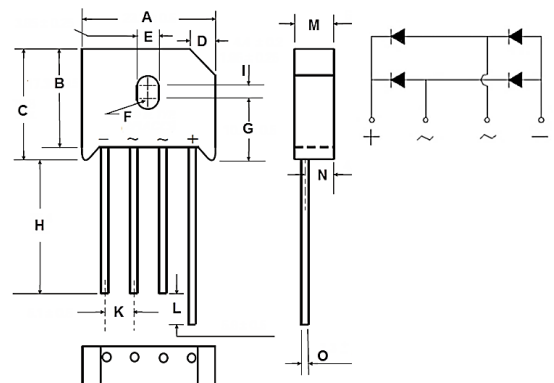


Parameter	Code	KBU 6A	KBU 6B	KBU 6D	KBU 6G	KBU 6J	KBU 6K	KBU 6M	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	$I_F$	6.0, $T_C=100^\circ\text{C}$							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	250							A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	300							$\text{A}^2\text{sec}$
Maximum Instantaneous Forward Voltage Drop per Diode	$V_F$	1.1, $I_F=6.0\text{A}$							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	$I_R$	10, $T_A=25^\circ\text{C}$							$\mu\text{A}$
	$I_R$	500, $T_A=125^\circ\text{C}$							$\mu\text{A}$
Operating Junction and Storage Temperature	$T_J, T_{STG}$	-55~150							$^\circ\text{C}$
Typical Thermal Resistance per Element	$R_{\theta JA}$	2.7							$^\circ\text{C/W}$

- 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.

## DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)	Item	Min. (mm)	Max. (mm)
A	22.70	23.70	H	25.40	-
B	16.80	17.80	I	1.70	2.20
C	-	19.30	K	4.60	5.60
D	4.20	4.60	L	5.10	6.10
E	3.60	4.10	M	6.60	7.00
F	1.90 R. TYP. (2 PLACES)		N	4.70	5.10
G	10.30	11.30	O	1.20	1.30



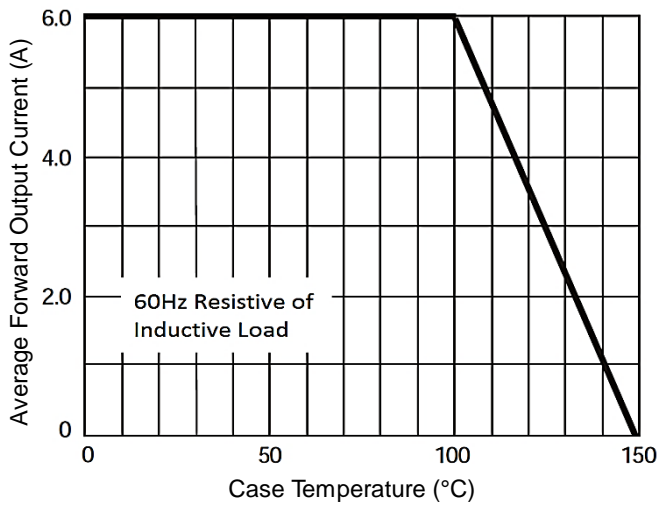
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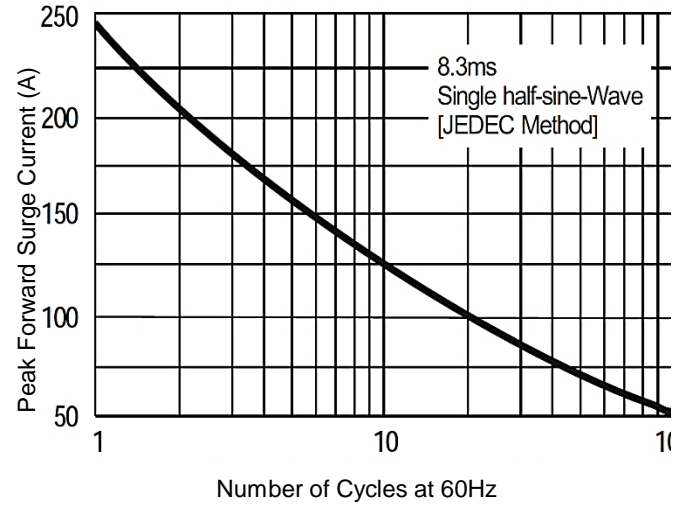
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## RATING AND CHARACTERISTIC CURVES

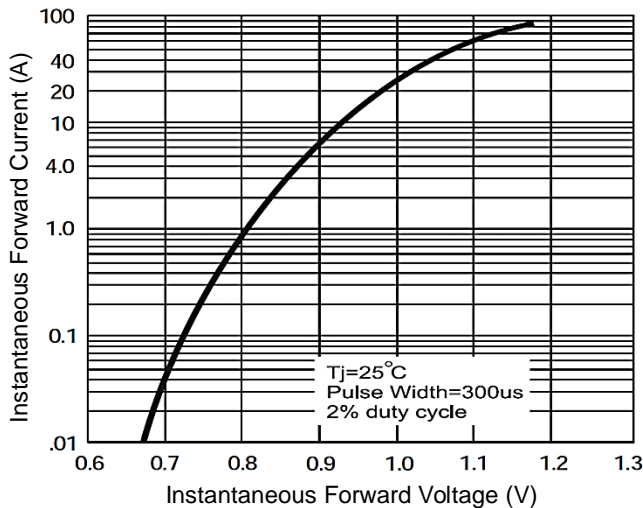
Derating Curve for Output Rectified Current



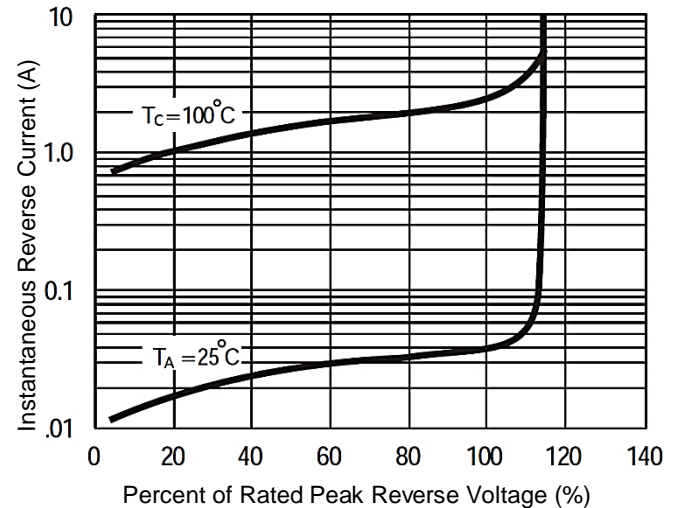
Maximum Non-Repetitive Peak Forward Surge Current



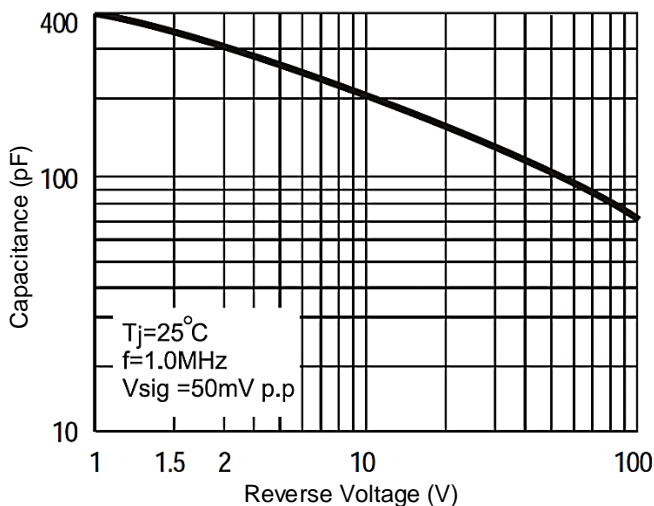
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics at  $T_J=25^\circ\text{C}$



Typical Junction Capacitance



\*Specifications subject to change without notice.