

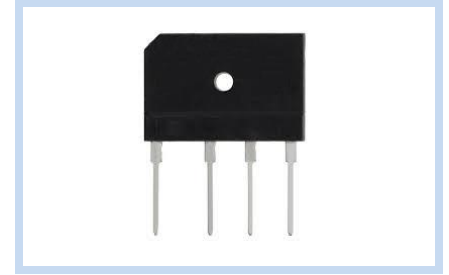
# Single-Phase Bridge Rectifier 8.0A KBJ6 Package

KBJ8 Series

MERITEK

## FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 8.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 170A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



## MAXIMUM RATINGS AND THERMAL CHARACTERISTICS



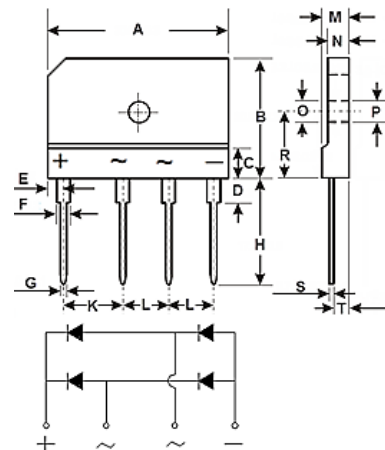
Parameter	Code	KBJ 8005	KBJ 801	KBJ 802	KBJ 804	KBJ 806	KBJ 808	KBJ 810	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	$I_F$	8.0, $T_C=100^\circ\text{C}$ with heatsink							A
		2.9, $T_C=100^\circ\text{C}$ without heatsink							
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	170							A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	120							$\text{A}^2\text{sec}$
Maximum Instantaneous Forward Voltage Drop per Diode	$V_F$	1.0, $I_F=4.0\text{A}$							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	$I_R$	10.0, $T_A=25^\circ\text{C}$							$\mu\text{A}$
		500, $T_A=125^\circ\text{C}$							$\mu\text{A}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~150							$^\circ\text{C}$
Maximum Thermal Resistance	$R_{\theta JC}$	1.6							$^\circ\text{C}/\text{W}$

### Note:

1. Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate current by 20%.
2. Device mounted on 100mm x100mm x1.6mm copper plate heatsink.

## DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)	Item	Min. (mm)	Max. (mm)
A	29.70	30.30	L	7.30	7.70
B	19.70	20.30	M	4.40	4.80
C	5.0 TYP.		N	3.40	3.80
D	3.80	4.20	O	3.00	3.40
E	2.30	2.70	P	3.30	3.70
F	2.00	2.40	R	10.80	11.20
G	0.90	1.10	S	0.60	0.80
H	17.00	18.00	T	2.50	2.90
K	9.80	10.20			



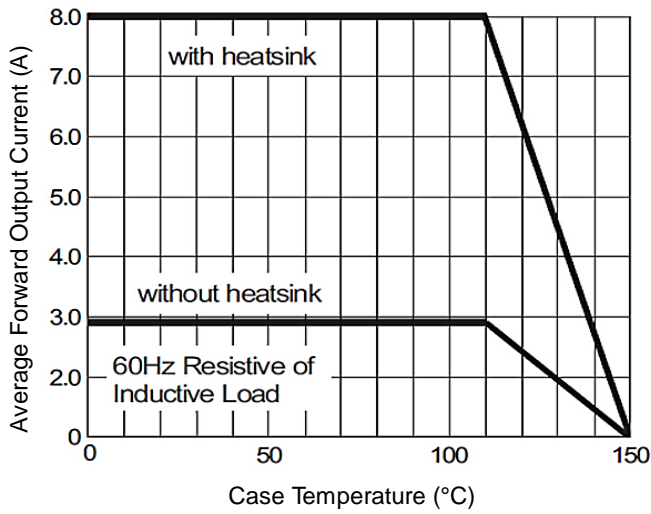
# Single-Phase Bridge Rectifier 8.0A KBJ6 Package

KBJ8 Series

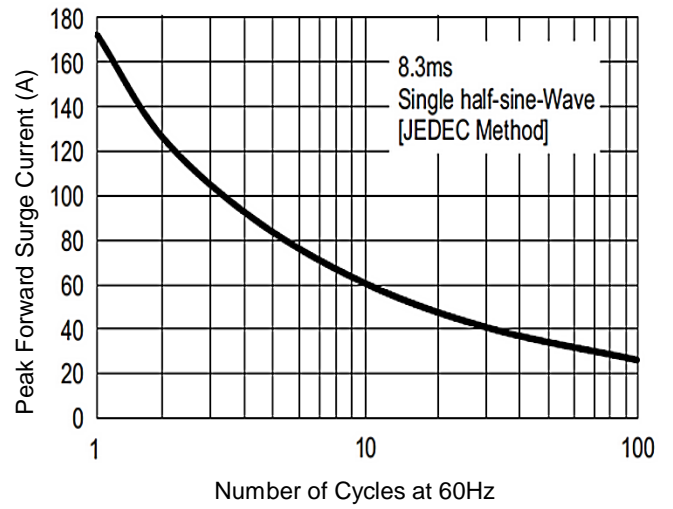
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## RATING AND CHARACTERISTIC CURVES

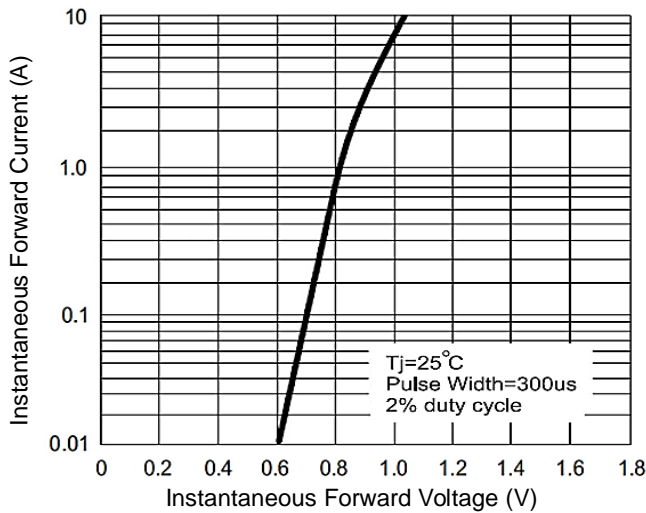
Derating Curve for Output Rectified Current



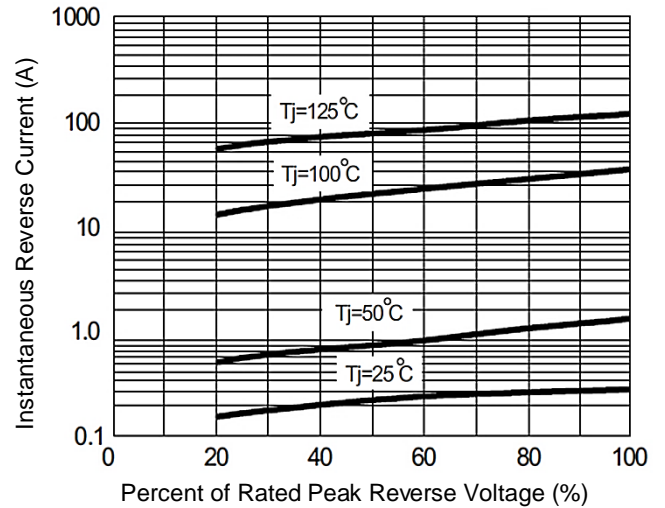
Maximum Non-Repetitive Peak Forward Surge Current



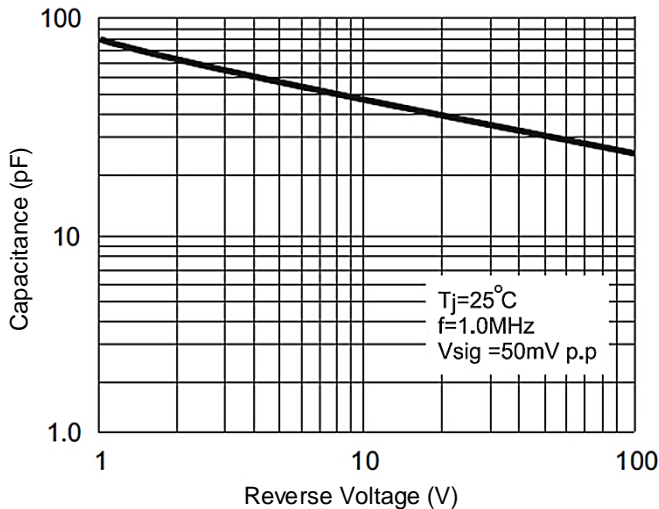
Typical Instantaneous Forward Characteristics



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



Typical Junction Capacitance



\*Specifications subject to change without notice.