

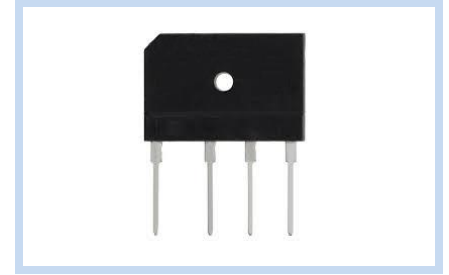
Single-Phase Bridge Rectifier 25.0A KBJ6 Package

KBJ25 Series

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FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 25.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 350A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS



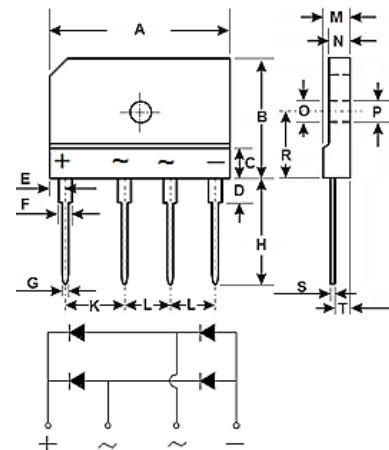
Parameter	Code	KBJ 25005	KBJ 2501	KBJ 2502	KBJ 2504	KBJ 2506	KBJ 2508	KBJ 2510	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	I_F	25.0, $T_C=100^\circ\text{C}$ with heatsink							A
		4.2, $T_C=100^\circ\text{C}$ without heatsink							
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	350							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	510							A^2sec
Maximum Instantaneous Forward Voltage Drop per Diode	V_F	1.05, $I_F=12.5\text{A}$							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	I_R	10.0, $T_A=25^\circ\text{C}$							μA
	I_R	500, $T_A=125^\circ\text{C}$							μA
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~150							$^\circ\text{C}$
Maximum Thermal Resistance	$R_{\theta JC}$	1.0							$^\circ\text{C/W}$

Note:

1. Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate current by 20%.
2. Device mounted on 250mm x250mm x20mm aluminum 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	-	-	-



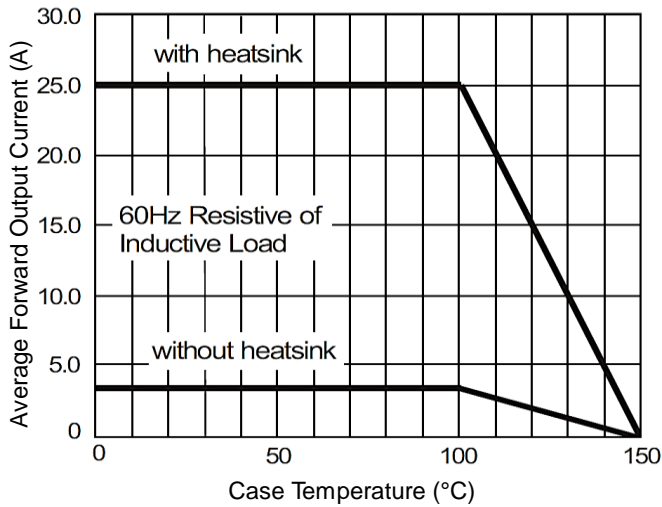
Single-Phase Bridge Rectifier 25.0A KBJ6 Package

KBJ25 Series

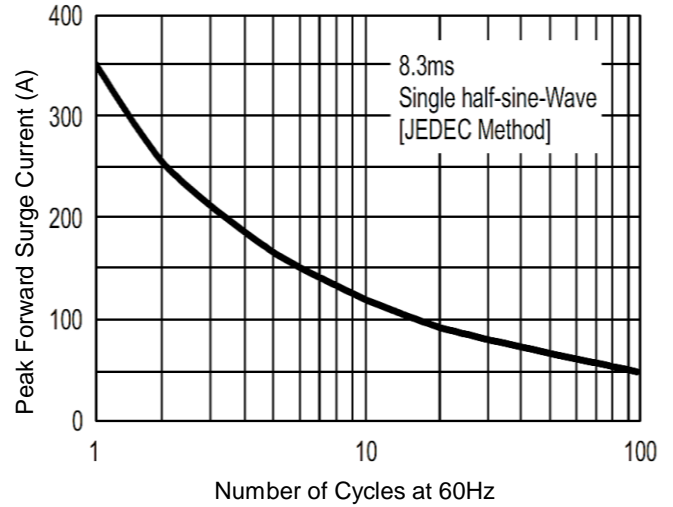
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RATING AND CHARACTERISTIC CURVES

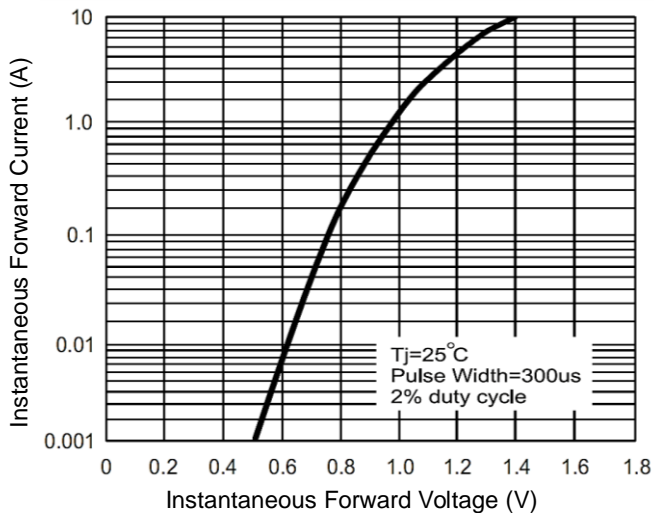
Derating Curve for Output Rectified Current



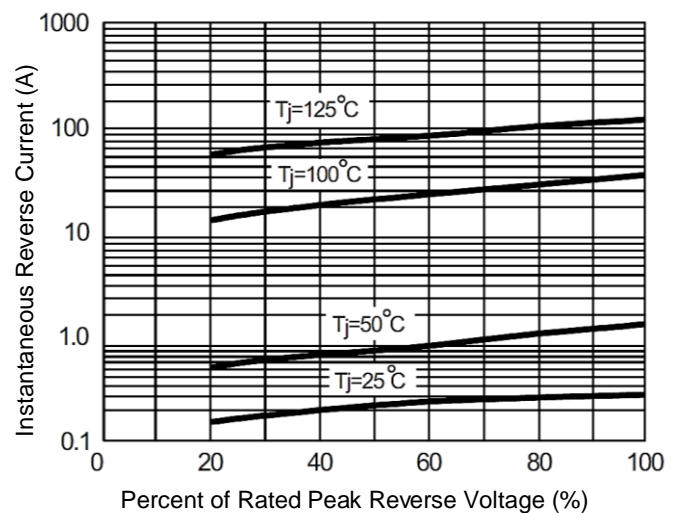
Maximum Non-Repetitive Peak Forward Surge Current



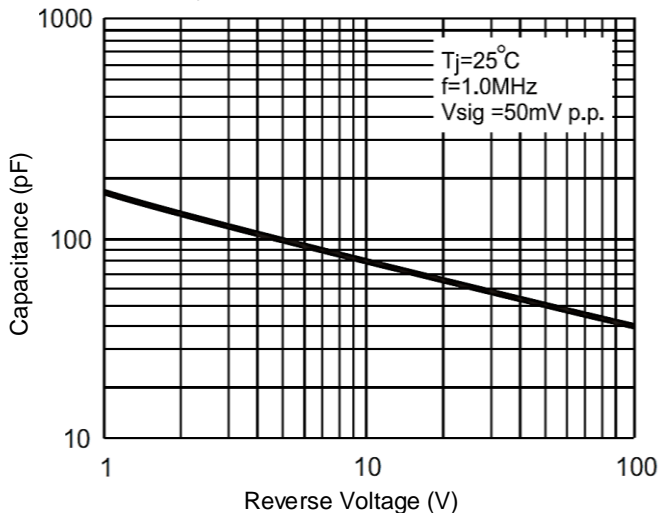
Typical Instantaneous Forward Characteristics



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



Typical Junction Capacitance



*Specifications subject to change without notice.