

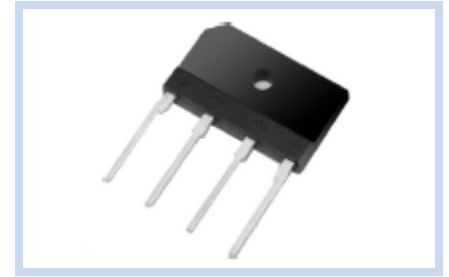
Single-Phase Bridge Rectifier 4.0A KBJ4 Package

KBJ4 Series

MERITEK

FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 4.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 120A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS



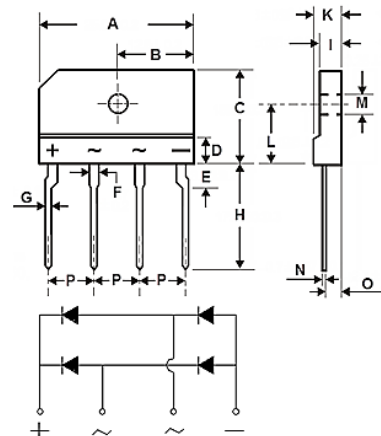
Parameter	Code	KBJ 4005	KBJ 401	KBJ 402	KBJ 404	KBJ 406	KBJ 408	KBJ 410	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	I_F	4.0, $T_C=100^\circ\text{C}$							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	120							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	60							A^2sec
Maximum Instantaneous Forward Voltage Drop per Diode	V_F	1.0, $I_F=2.0\text{A}$							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	I_R	10, $T_A=25^\circ\text{C}$							μA
	I_R	250, $T_A=125^\circ\text{C}$							μA
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~150							$^\circ\text{C}$
Maximum Thermal Resistance	$R_{\theta JC}$	5.5							$^\circ\text{C/W}$

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 75mm x 75mm x 1.6mm Cu Plate Heatsink.
3. Recommended mounting position is to bolt down on heat sink with silicone thermal compound for maximum heat transfer with # 6 screws.

DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)	Item	Min. (mm)	Max. (mm)
A	24.80	25.20	I	3.40	3.80
B	12.30	12.70	K	4.40	4.80
C	14.70	15.30	L	9.30	9.70
D	4.00 TYP.		M	3.10	3.40
E	3.30	3.70	N	0.60	0.80
F	1.50	1.90	O	2.50	2.90
G	0.90	1.10	P	7.30	7.70
H	17.20	17.80			



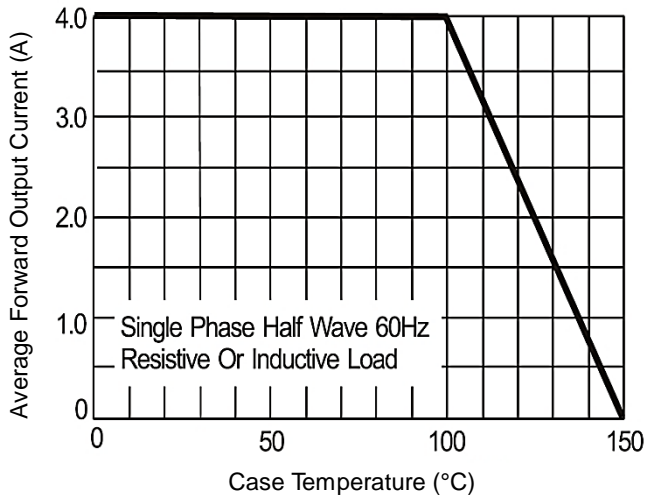
Single-Phase Bridge Rectifier 4.0A KBJ4 Package

KBJ4 Series

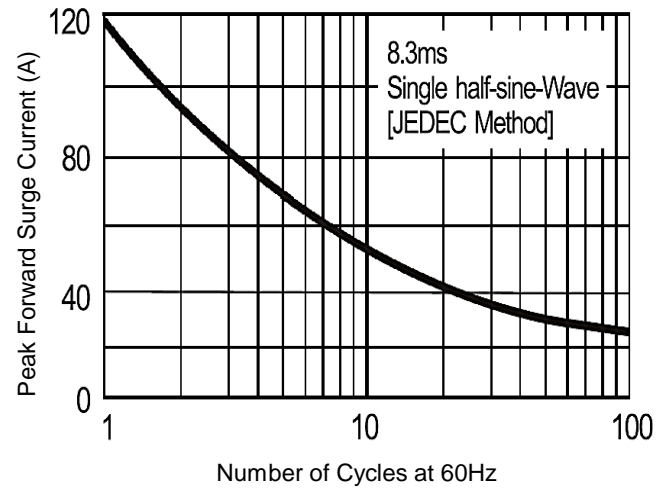
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RATING AND CHARACTERISTIC CURVES

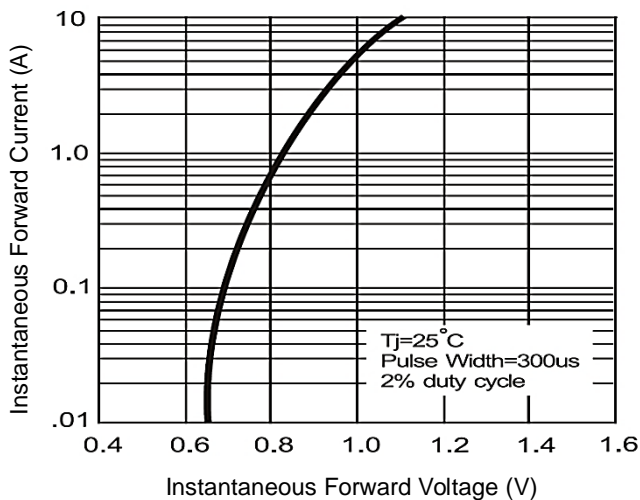
Derating Curve for Output Rectified Current



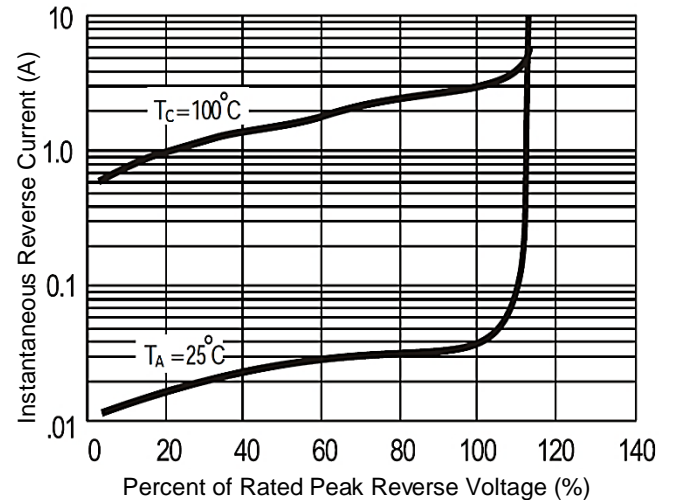
Maximum Non-Repetitive Peak Forward Surge Current



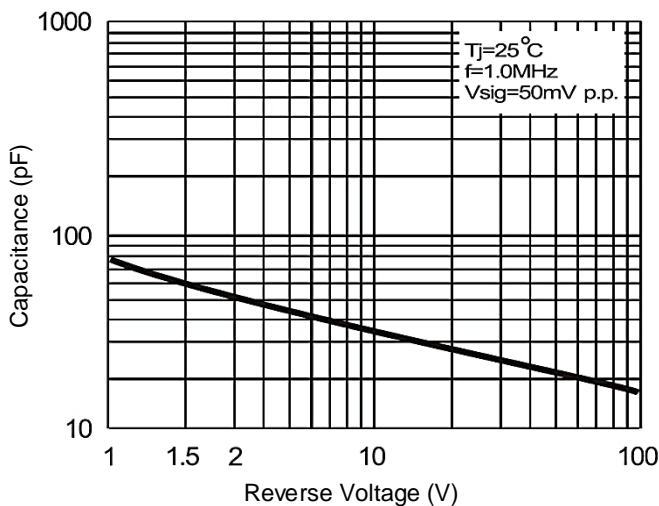
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



*Specifications subject to change without notice.