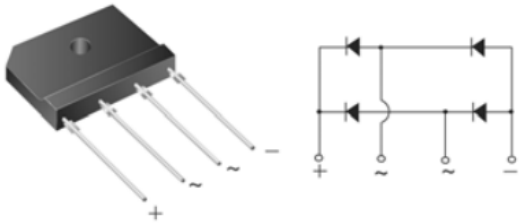
KBJ



Features

- ROHS compliant
- Glass passivated chip
- High forward surge capability
- Meet MSL level 1, per J-STD-020 LF maximum peak of 250 °C
- Solder dip 260 °C / 40S
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC
- UL recognition, file number E342874

Primary characteristics

$I_{F(AV)}$	4.0A
V_{RRM}	50V to 1000V
I_{FSM}	80A
I_{RM}	5uA
V_{FM} at I_F=2.0	1.0
T_J max.	150 °C

Applications

Ideal for ac-to-dc bridge full wave rectification suck as SMPS, home applianes, office equipment, indusrial automation applicatios

Mechanical data

- Case: KBJ
- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.
- Mounting Torque:10cm-kg(8.8 inches-lbs)max.
- Recommended Torque:5.7 cm-kg(5 inches-lbs)

Maximum rating (Ta=25°C unless otherwise noted)

Parameter		Sym	KBJ							Unit
			KBJ 4005	KBJ 401	KBJ 402	KBJ 404	KBJ 406	KBJ 408	KBJ 410	
Max. repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Max. RMS reverse voltage		V_{RMS}	35	70	140	280	420	560	700	V
Max. DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	V
Max. average forward current		$I_{F(AV)}$	4.0							A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave		I_{FSM}	80.0							A
Rating for fusing,1ms≦ t≦8.3ms		I^2t	26							A^2S
Max. instantaneous forward voltage drop per diode		V_{FM}	1.0 (2.0)							V
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25 °C	I_{RM}	5							μA
	Ta=125 °C		250							μA
Operating junction temperature		T_J	-55 ~ +150							°C
Storage temperature		T_{STG}	-55 ~ +150							°C
Typical thermal resistance (Note2,1)		$R_{\Theta J-A}$	26							°C/W
		$R_{\Theta J-C}$	5							°C/W

Notes

(1) Unit case mounted on 6.3x6.3x0.15cm thick Al plate heatsink

(2) Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13 mm) copper pads and 0.375" (9.5 mm) lead length

Ordering information (Example)

PREFERRED	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
KBJ410				

Typical characteristics

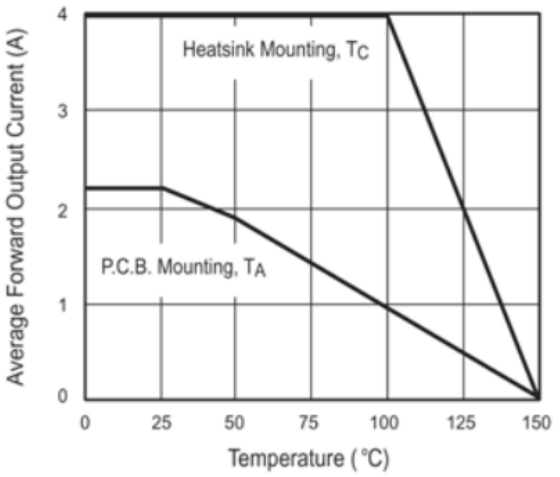


Figure 1. Derating Curve Output Rectified Current

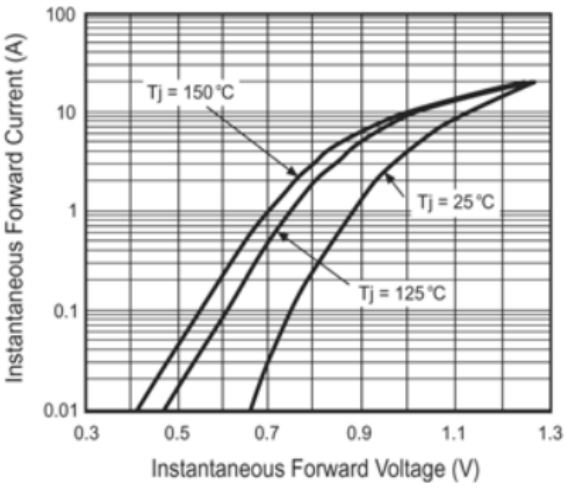


Figure 3. Typical Forward Characteristics Per Leg

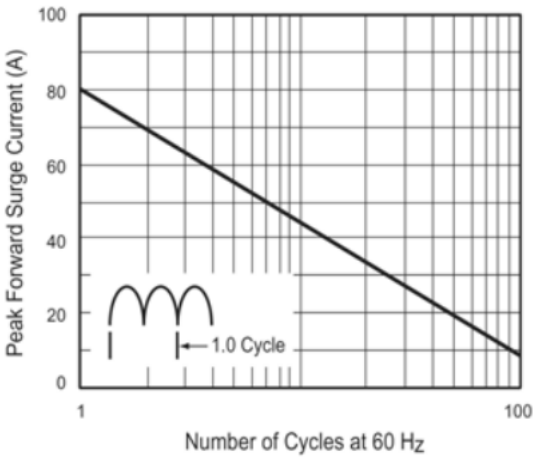


Figure 2. Maximum Non-Repetitive Peak Forward Surge Curre
Per Leg

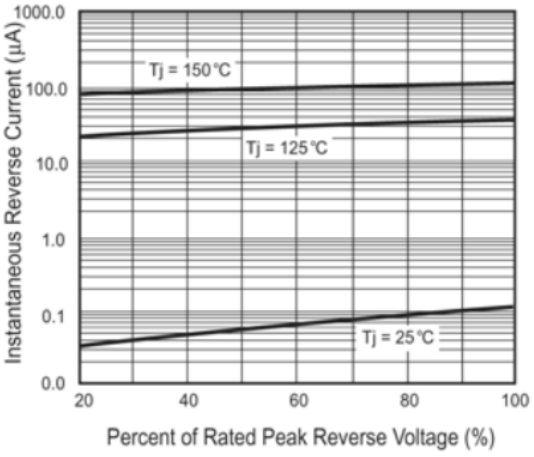
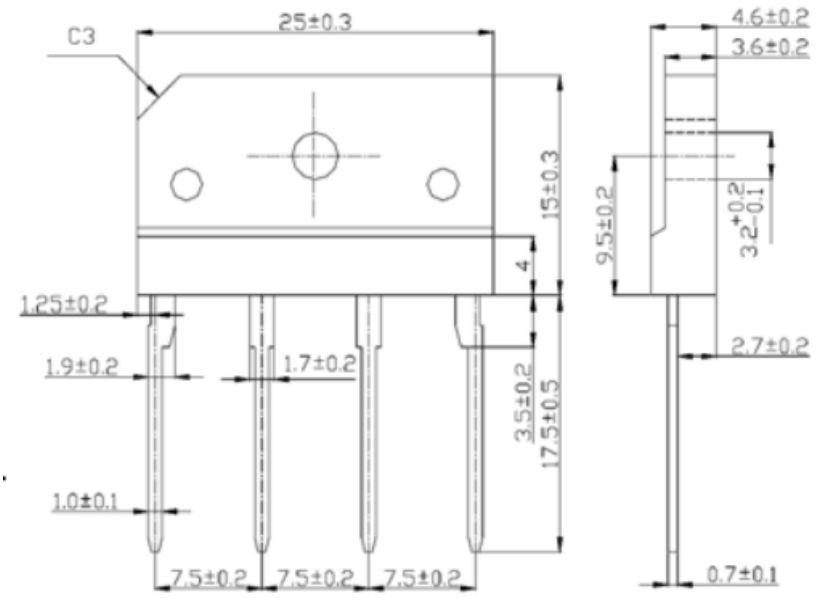


Figure 4. Typical Reverse Characteristics Per Leg

Package outline dimensions



Package outline dimensions in millimeters

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