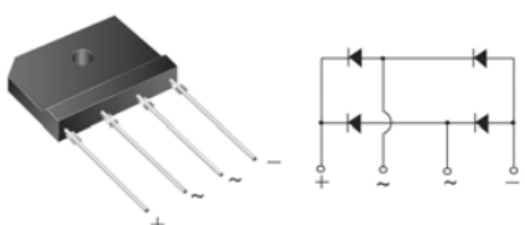


KBJ		Features										
		<ul style="list-style-type: none"> ROHS compliant Glass passivated chip High forward surge capability Meet MSL level 1, per J-STD-020 LF maximum peak of 250 °C Solder dip 260 °C / 40S Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC UL recognition, file number E342874 										
Primary characteristics		Applications										
$I_{F(AV)}$	4.0A	Ideal for ac-to-dc bridge full wave rectification such as SMPS, home appliances, office equipment, industrial automation applications										
V_{RRM}	50V to 1000V											
I_{FSM}	120A											
I_{RM}	5uA											
V_{FM} at $I_F=2.0$	1.0											
T_J max.	150 °C											
Maximum rating (Ta=25°C unless otherwise noted)		Mechanical data										
Parameter		Sym		KBJ								Unit
				KBJ 4005U	KBJ 401U	KBJ 402U	KBJ 404U	KBJ 406U	KBJ 408U	KBJ 410U		
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}	120								A	
Rating for fusing, $1ms \leq t \leq 8.3ms$		I^2t	60								A ² S	
Max. instantaneous forward voltage drop per diode		V_{FM}	1 (2.0)								V	
Max. instantaneous reverse current at rated DC blocking voltage		I_{RM}	5								μA	
		I_{RM}	250								μA	
Operating junction temperature		T_J	-55 ~ +150								°C	
Storage temperature		T_{STG}	-55 ~ +150								°C	
Typical thermal resistance (Note2,1)		R_{J-A}	26								°C/W	
		R_{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
KBJ410U				

Typical characteristics

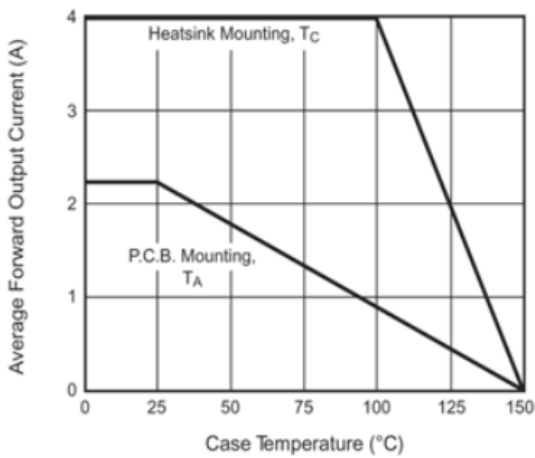


Figure 1. Derating Curve Output Rectified Current

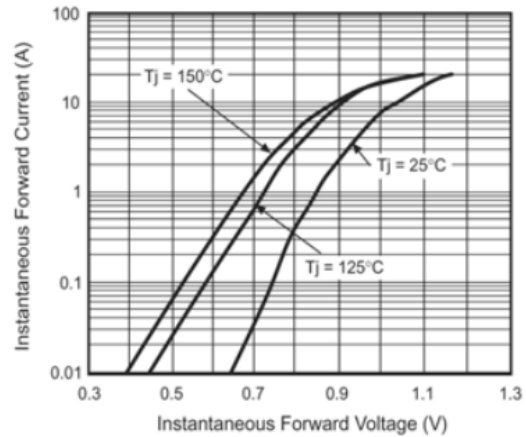


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

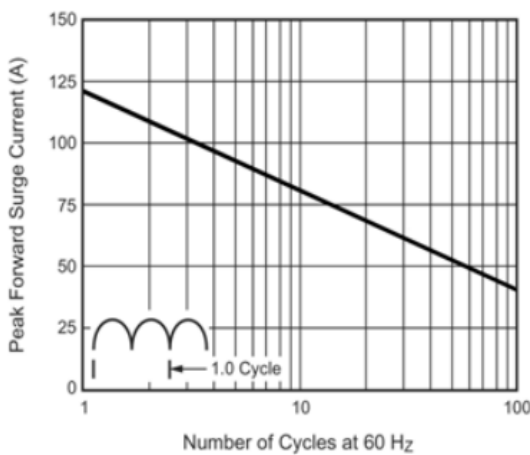


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

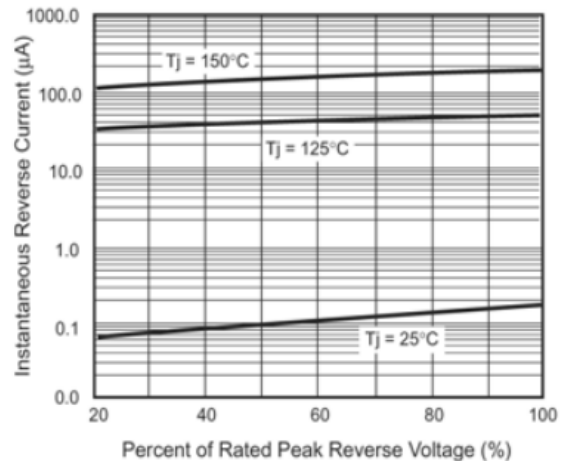
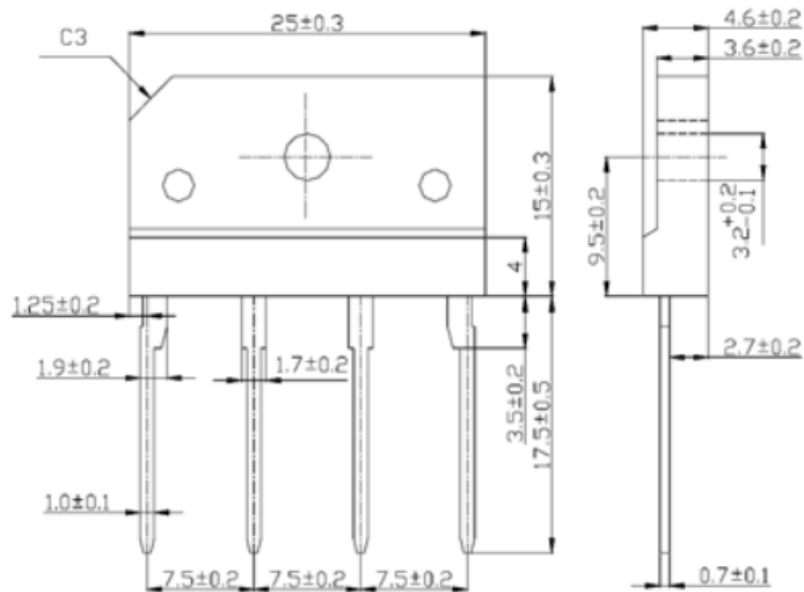


Figure 4. Typical Reverse Characteristics Per Leg

Package outline dimensions



Package outline dimensions in millimeters

Golden SEMI Inc. - Legal Notice

Disclaimer – All data and specifications are subject to changes without notice

GOLDEN SEMI Inc, it's affiliates, agents, distributors and employees neither accept nor assume any responsibility for errors or inaccuracies. All data and specifications are intended for information and provide a product description only. Electrical and mechanical parameters listed in GOLDEN SEMI data sheets and specifications will vary dependent upon application and environmental conditions . GOLDEN SEMI is not liable for any damages occurred or resulting from any circuit, product or end-use application for which it's products are used. GOLDEN SEMI products are not intended or designed for use in life saving or sustaining apparatus and purchase of any GOLDEN SEMI products automatically indemnifies GOLDEN SEMI against any claims or damages resulting from application malfunction