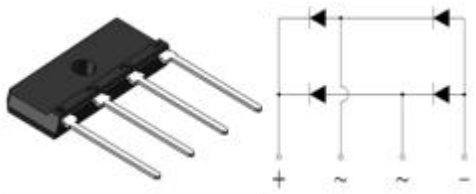
Reverse Voltage 600~1000V Output Current 15.0A

Features



KBJL

- Thin Single In-Line package;
- Ideal for printed circuit boards;
- Glass Passivated chip junction;
- Low profile package;
- High Surge current capability;
- High case dielectric strength of 2000 VRMS ;
- Plastic package has Underwrites Laboratory Flammability Classification 94V-0;
- Same footprint V.S KBJ (3S) package;

Typical Applications

- General purpose use in AC-to-DC bridge full wave rectification for Switching Power Supply, Home Appliances, Office Equipment, Industrial Automation applications.

Mechanical Data

- Case: KBJL; Epoxy meets UL-94V-0 Flammability rating; Base P/N with suffix"E" on packing code-halogen free;
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102; E3 suffix for customer grade, meet JESD 201 class 1A whisker test;
- High temperature soldering guaranteed: Solder Dip 270°C, 10seconds;
- Polarity: As marked on body;
- Mounting Torgue: 5.7cm-kg (5.0 inches-lbs) max;
- Recommend Torgue:Mounting Torgue: 5.7cm-kg (5inches-lbs);

Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter		Symbol	KBJL15J	KBJL15K	KBJL15M	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	600	800	1000	V
Maximum RMS voltage		V_{RMS}	420	560	700	V
Maximum DC blocking voltage		V_{DC}	600	800	1000	V
Maximum average forward rectified output current at	T_C=110°C	$I_{F(AV)}$	15(1)			A
	T_A=25°C		3.2(2)			
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		I_{FSM}	240			A
Rating for fusing(t<8.3ms)		I^2t	240			A^2sec
Operating junction and storage temperature range		T_J, T_{STG}	- 55 to + 150			°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)						
Parameter		**Symbol**	**KBJL15J**	**KBJL15K**	**KBJL15M**	**Unit**
Maximum instantaneous forward voltage drop per leg at 7.5A		V_F	1.00			Volts
Maximum DC reverse current at rated DC blocking voltage per leg	TA=25°C	I_R	5.0			μA
	TA=125°C		150			
Typical thermal resistance per leg		$R_{\theta JA}$(2)	25			°C/W
		$R_{\theta JC}$(1,3)	2.5			

1). Unit case mounted on Al plate heatsink;

2). Units mounted on PCB without heatsink;

3). Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

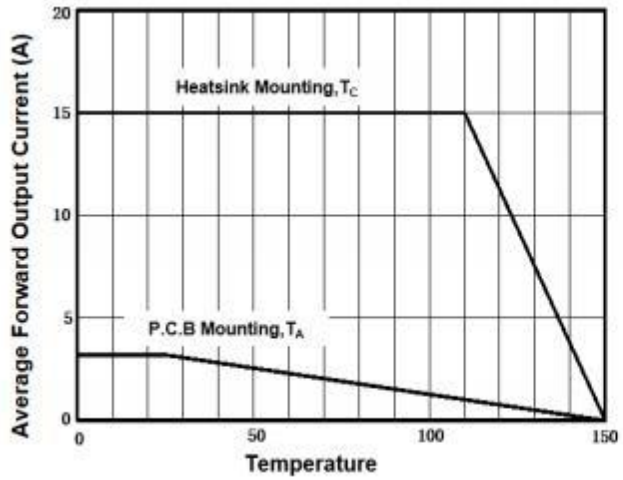


FIG.2-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT

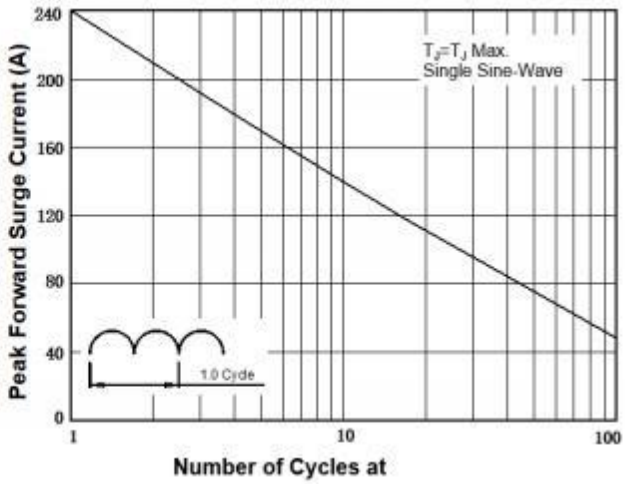


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

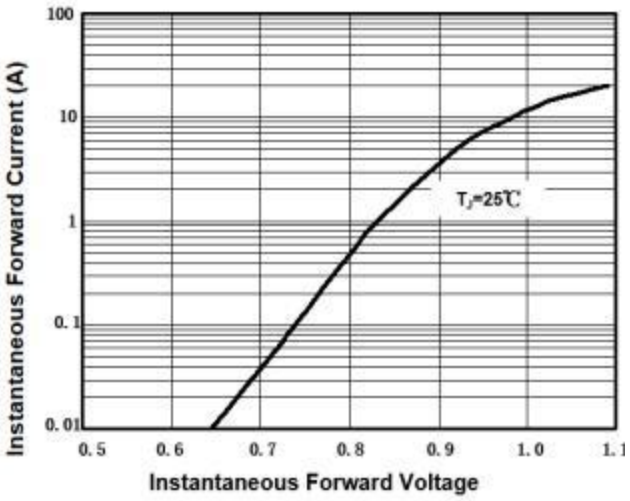
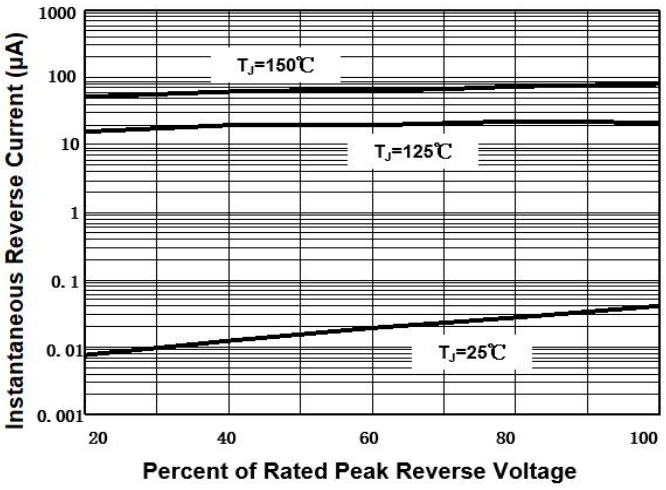


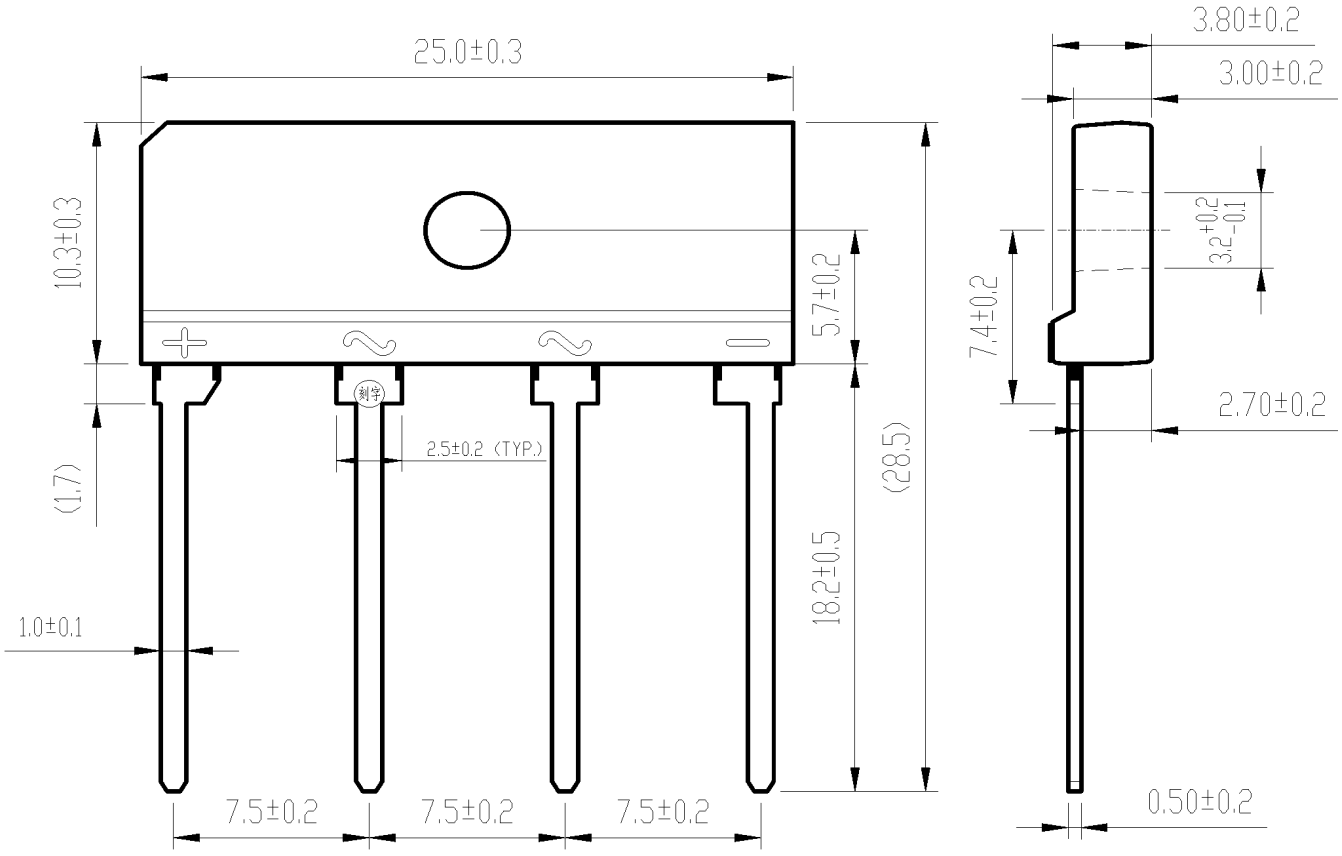
FIG.4-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS



Package Outline Dimensions

Package Dimensions in mm

First angle projection



elevation view

right elevation

Revision History

Document Version	Date of release	Discroption of changes
Rev.A	2021/3/1	Released Datasheet
Rev.B	2023/12/8	Modify document format

Disclaimers

These materials are intended as a reference to assist our customers in the selection of the Suzhou Good-Ark product best suited to the customer’ s application; they do not convey any license under any intellectual property rights, or any other rights, belonging to Suzhou Good-Ark Electronics Co., Ltd.or a third party.

Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, or infringement of any third-party’ s rights, originating in the use of any product data, diagrams, charts, programs, algorithms, or circuit application examples contained in these materials.

All information contained in these materials, including product data, diagrams, charts, programs and algorithms represents information on products at the time of publication of these materials, and are subject to change by Suzhou Good-Ark Electronics Co., Ltd. without notice due to product improvements or other reasons. It is therefore recommended that customers contact Suzhou Good-Ark Electronics Co., Ltd. or an authorized Suzhou Good-Ark Electronics Co., Ltd. for the latest product information before purchasing a product listed herein. The information described here may contain technical inaccuracies or typographical errors. Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, liability, or other loss rising from these inaccuracies or errors. Please also pay attention to information published by Suzhou Good-Ark Electronics Co., Ltd. by various means, including our website home page.
(http://www.goodark.com)

When using any or all of the information contained in these materials, including product data, diagrams, charts, programs, and algorithms, Please be sure to evaluate all information as a total system before making a final decision on the applicability of the information and products. Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, liability or other loss resulting from the information contained herein.

The prior written approval of Suzhou Good-Ark Electronics Co., Ltd. is necessary to reprint or reproduce in whole or in part these materials.

Please contact Suzhou Good-Ark Electronics Co., Ltd. or an authorized distributor for further details on these materials or the products contained herein.