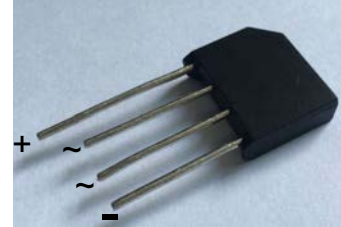


**Features:**

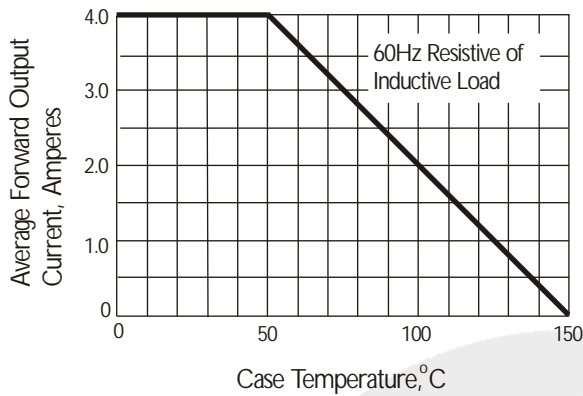
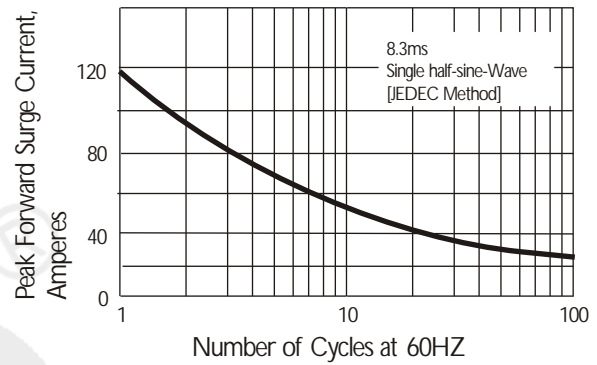
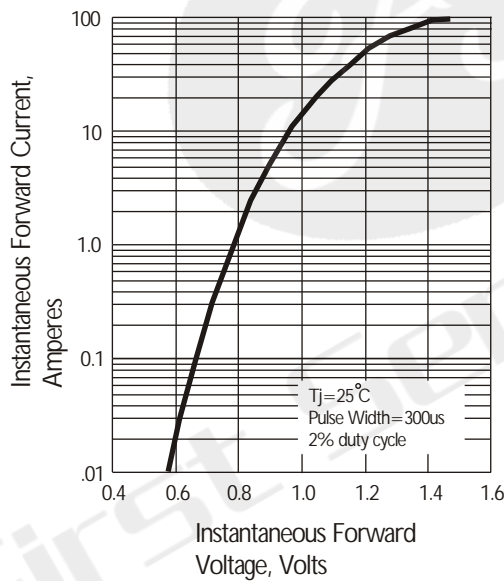
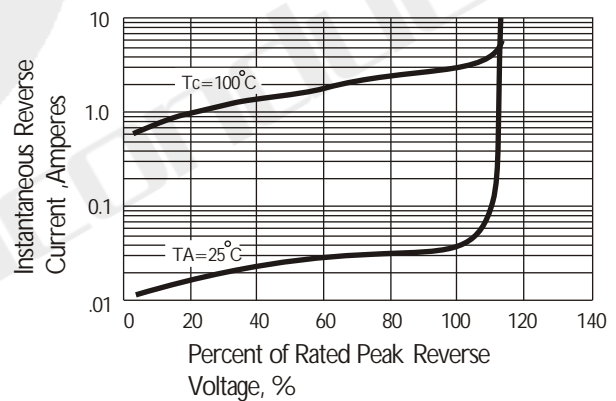
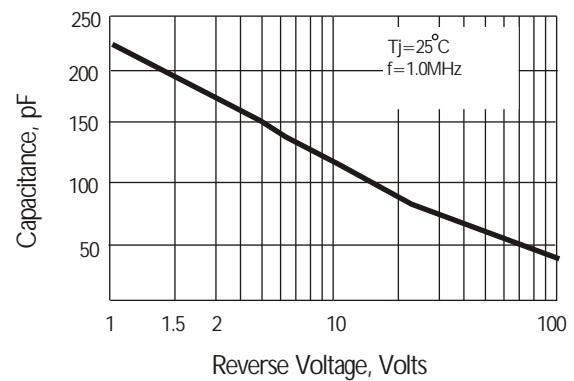
- ☐ High surge current capability
- ☐ Ideal for printed circuit boards
- ☐ Plastic package has Underwriters  
Laboratory Flammability Classification 94V-0

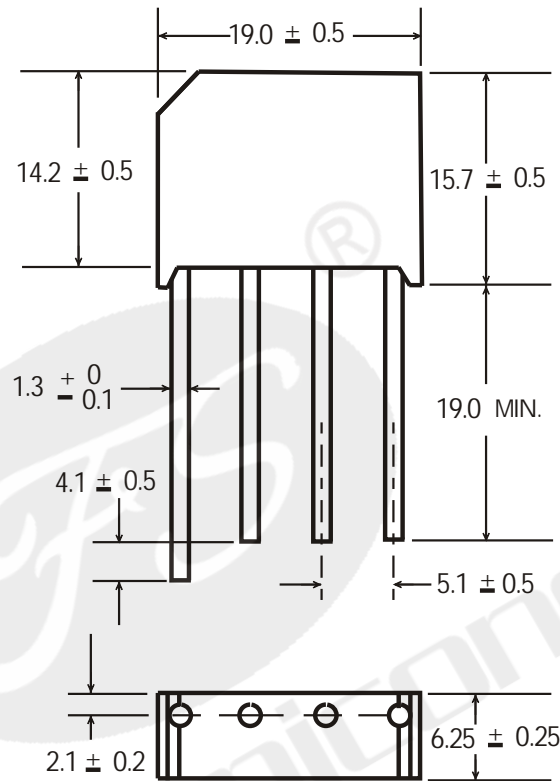
**KBL****Absolute Maximum Ratings** (Ta=25°C unless otherwise noted)

Parameter	Symbol	KBL 4005CG	KBL 401CG	KBL 402CG	KBL 404CG	KBL 406CG	KBL 408CG	KBL 410CG	Unit
Maximum Reverse Peak Repetitive Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current, @ Ta=50°C	I <sub>(AV)</sub>	4.0							A
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	120							
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	60							A <sup>2</sup> s
Maximum Reverse Current @ rated V <sub>R</sub> T <sub>j</sub> = 25°C T <sub>j</sub> = 125°C	I <sub>R</sub>	10 500							μA
Maximum Forward Voltage @ 4.0 A	V <sub>F</sub>	1.1							V
Maximum Thermal Resistance	R <sub>θJA</sub>	2.6							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150							°C



## Typical Characteristics

**Fig. 1 Derating Curve for Output Rectified Current****Fig. 2 Maximum Non-repetitive Peak Forward Surge Current****Fig. 3 Typical Instantaneous Forward Characteristics****Fig. 4 Typical Reverse Characteristics at T<sub>J</sub> = 25°C****Fig. 5 Typical Junction Capacitance**

**Package Dimension****KBL**

Dimensions in millimeters(1mm =0.0394" )

**Declaration**

- FIRST reserves the right to change the specifications, the same specifications of products due to different packaging line mold, the size of the appearance will be slightly different, shipped in kind, without notice! Customers should obtain the latest version information before ordering, and verify whether the relevant information is complete and up-to-date.
- Any semiconductor product under certain conditions has the possibility of failure or failure, The buyer has the responsibility to comply with safety standards and take safety measures when using FIRST products for system design and manufacturing, To avoid To avoid potential failure risks, which may cause personal injury or property damage!
- Product promotion endless, our company will wholeheartedly provide customers with better products!

**ATTACHMENT****Revision History**

Date	REV	Description	Page
2018.01.01	1.0	Initial release	