



# KBL Plastic-Encapsulate Bridge Rectifier

## KBL4005 THRU KBL410

General Purpose Bridge Rectifier

### Features

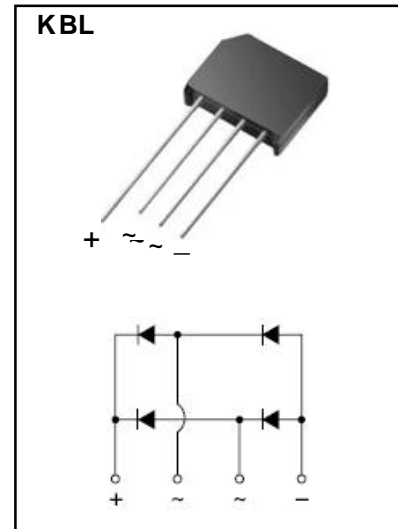
- I<sub>O</sub> 4A
- VRRM 50V-1000V
- High surge current capability
- Glass passivated chip

### Applications

- General purpose 1 phase Bridge rectifier applications

### Marking

- KBL4XX
- XX : From 005 To 10



### Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	KBL4						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I <sub>O</sub>	A	60Hz sine wave, R-load T <sub>c</sub> =40°C	4						
Surge(Non-repetitive)Forward Current	I <sub>FSM</sub>	A	60Hz sine wave, 1 cycle, T <sub>j</sub> =25°C	125						
Current Squared Time	I <sup>2</sup> t	A <sup>2</sup> S	1ms≤t<8.3ms T <sub>j</sub> =25°C, Rating of per diode	93						
Storage Temperature	T <sub>stg</sub>	°C		-55 ~+150						
Junction Temperature	T <sub>j</sub>	°C		-55 ~+150						

### Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V <sub>FM</sub>	V	I <sub>FM</sub> =4.0A, Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	I <sub>RRM</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub> , Pulse measurement, Rating of per diode	10
Thermal Resistance	R <sub>θ J-A</sub>	°C/W	Between junction and ambient	13 <sup>(1)</sup>
	R <sub>θ J-C</sub>		Between junction and case	2.4 <sup>(2)</sup>

# Typical Characteristics

FIG.1-MAXIMUM FORWARD SURGE CURRENT

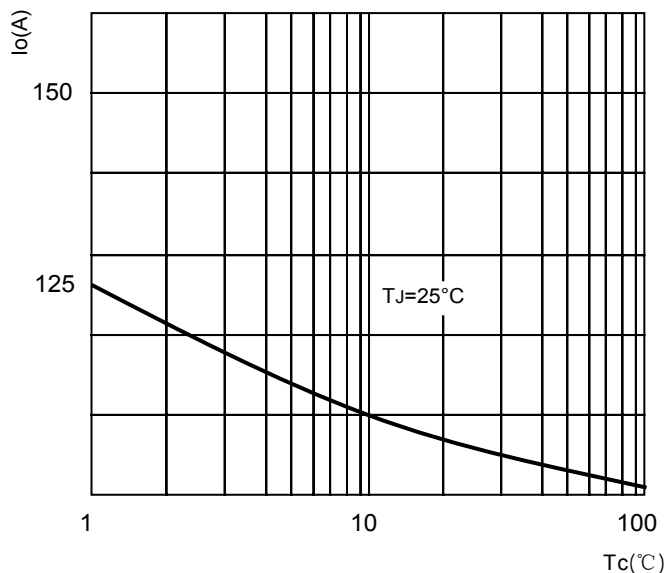


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

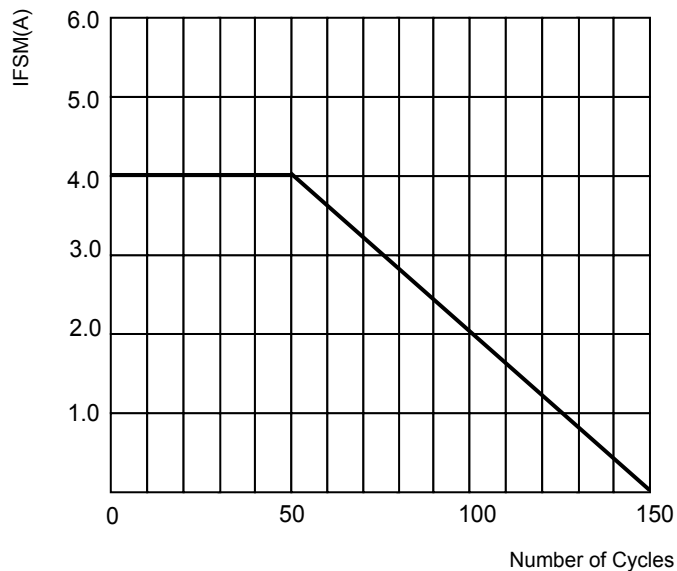


FIG.3-TYPICAL FORWARD CHARACTERISTICS

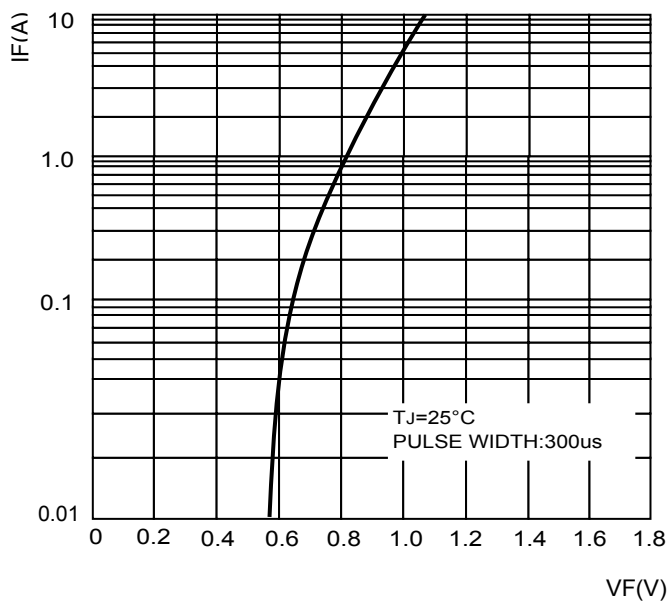
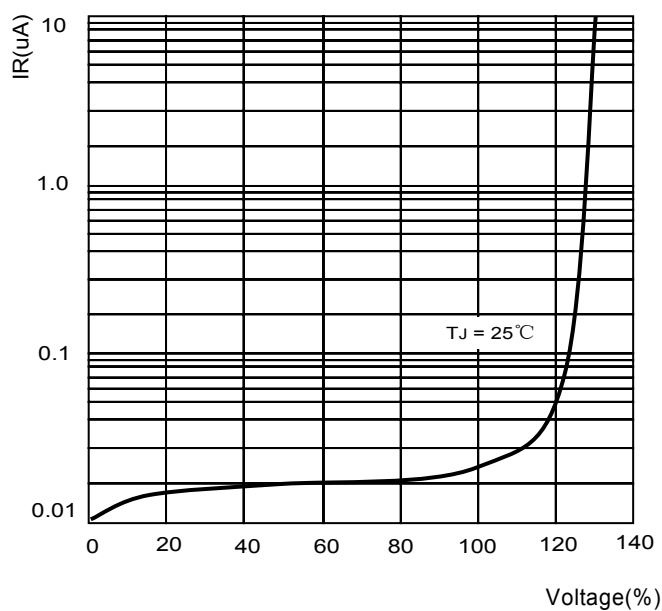
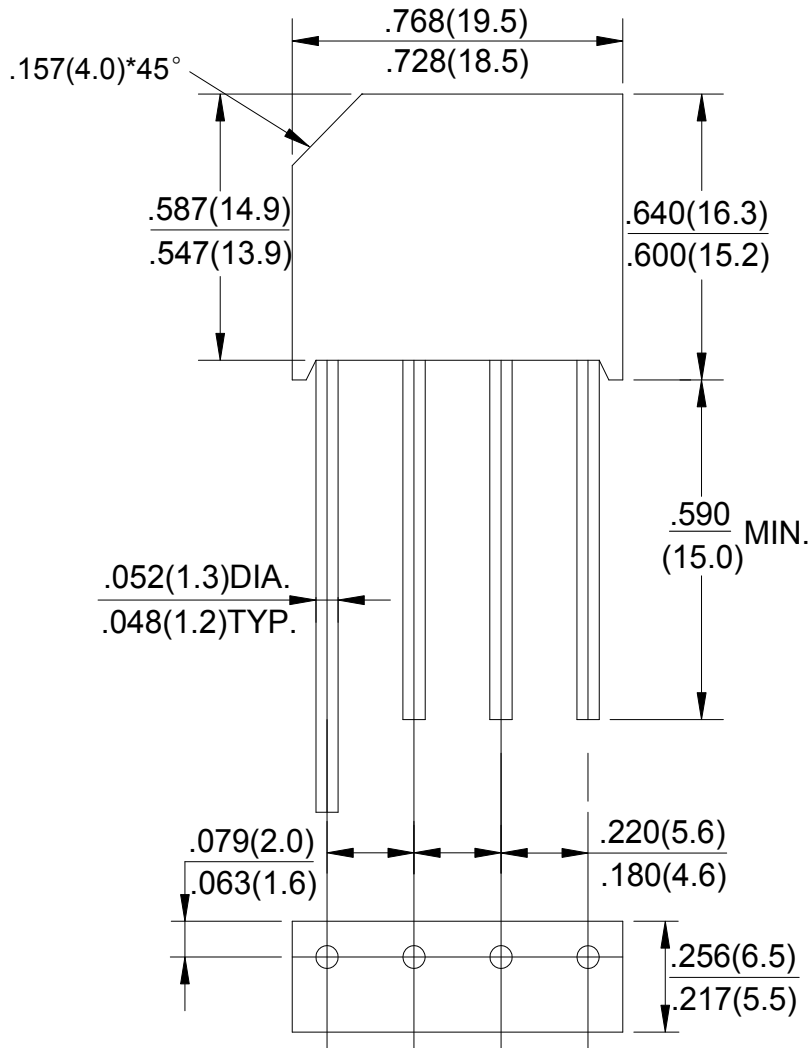


FIG.4-TYPICAL REVERSE CHARACTERISTICS



# KBL Package Outline Dimensions



Dimensions in inches and (millimeters)

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