

# Glass Passivated Bridge Rectifiers



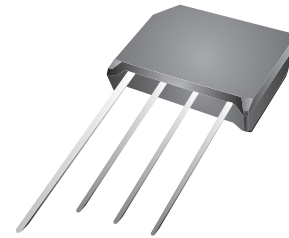
SMD Diodes Specialist

## KBL4005-G Thru. KBL410-G

Reverse Voltage: 50 to 1000V

Forward Current: 4.0Amperes

RoHS Device

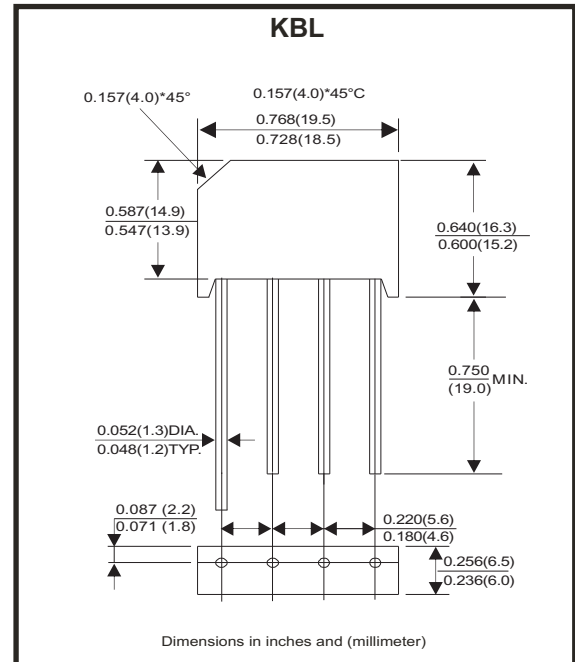


### Features

- Surge overload rating - 125 amperes peak.
- Ideal for printed circuit board.

### Mechanical Data

- Epoxy: U/L 94-V0 rate flame retardant.
- Case: Molded plastic, KBL
- Mounting position: Any
- Weight: 5.04grams



### Maximum ratings and electrical characteristics

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave ,60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

Parameter	Symbol	KBL 4005-G	KBL 401-G	KBL 402-G	KBL 404-G	KBL 406-G	KBL 408-G	KBL 410-G	Unit
Maximum Reverse Peak Repetitive Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current at 50°C T <sub>A</sub> (Note 1)	$I_{AV}$	4.0							A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	$I_{FSM}$	125							A
Maximum Forward Voltage Drop Per Element at 4.0A Peak	$V_F$	1.1							V
Maximum Reverse Current at Rate DC Blocking Voltage	$I_R$	10.0							μA
Maximum Reverse Current At Rate DC Blocking Voltage and 150°C T <sub>A</sub>	$I_R$	1.0							mA
Operating Temperature Range	$T_J$	-55 to +150							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

Notes:

1. Mounting conditions, 0.5" lead length maximum.

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## Rating and Characteristics Curves (KBL4005-G Thru. KBL410-G)

Fig.1- Derating Curve Output Rectified Current

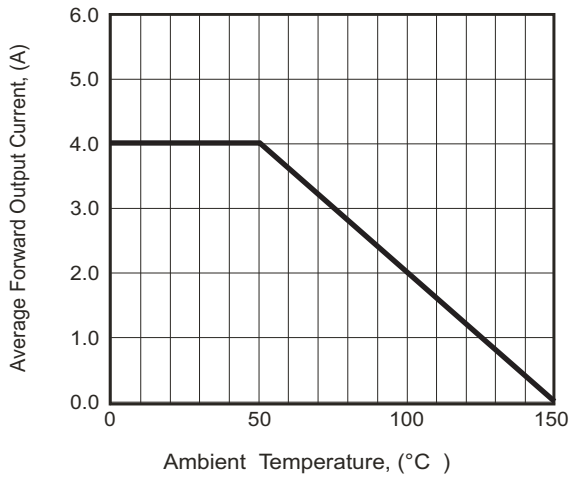


Fig.2- Maximum Forward Surge Current

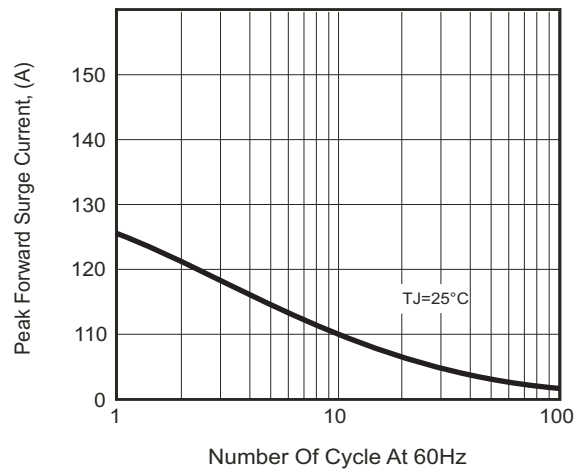


Fig.3- Typical Forward Characteristics

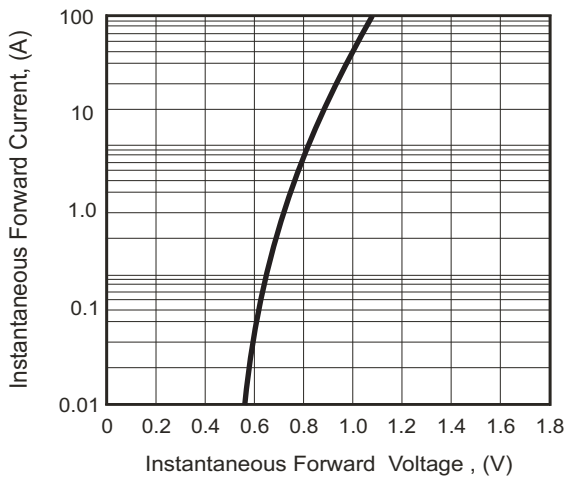
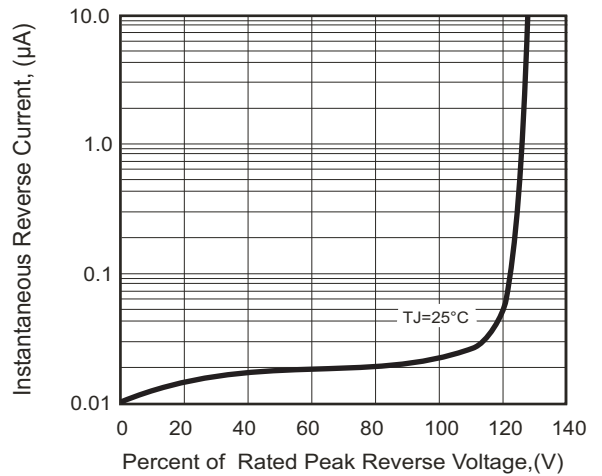
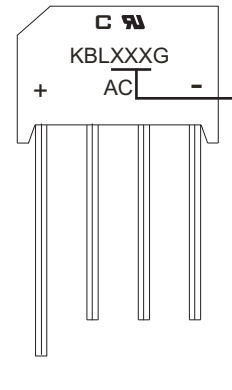


Fig.4- Typical Reverse Characteristics



## Marking Code

Part Number	Marking code
KBL4005-G	KBL005
KBL401-G	KBL01
KBL402-G	KBL02
KBL404-G	KBL04
KBL406-G	KBL06
KBL408-G	KBL08
KBL410-G	KBL10



XX / XXX = Product type marking code  
 C = Compchip Logo

## Standard Package

Case Type	BULK PACK		
	Box (EA)	Box / Carton (EA)	CARTON (EA)
KBL	500	6	3000