



### Features

- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 265 °C /10 seconds at 5 lbs (2.3kg) tension

### Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique  
 Terminals: Plated leads solderable per MIL-STD-202, Method 208  
 Mounting Position: Any  
 Weight: 0.2 ounce, 5.6 grams (approx)

### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified,  
 Resistive or Inductive load, 60 Hz.  
 For Capacitive load derate current by 20%.

Parameter	Symbol	KBL 6005	KBL 601	KBL 602	KBL 604	KBL 606	KBL 608	KBL 610	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=50 C	IF(AV)	6.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	200							A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t	166							A <sup>2</sup> sec
Typical thermal resistance per element (1)	ReJA	10.0							°C / W
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

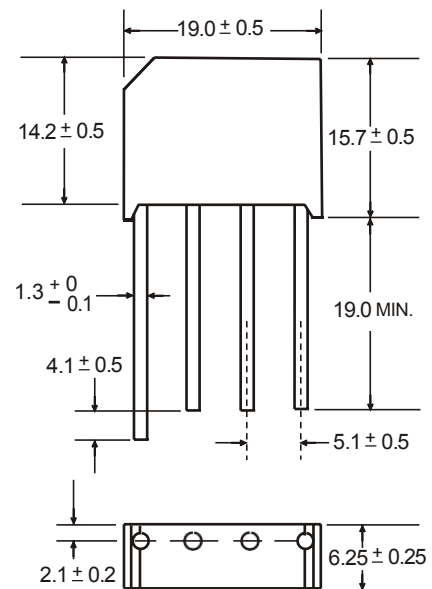
### Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
 For Capacitive load derate by 20 %.

Parameter	Symbol	KBL 6005	KBL 601	KBL 602	KBL 604	KBL 606	KBL 608	KBL 610	Unit
Maximum instantaneous forward voltage drop per leg at 6.0A	VF	1.1							V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10 1000							A

Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.

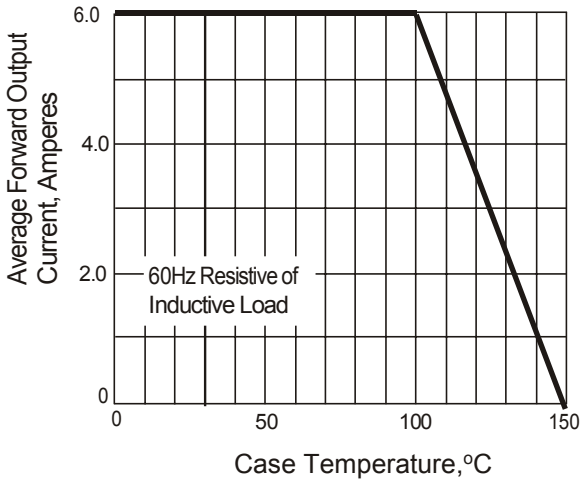
**6.0 A Sin le-Phase Silicon  
 Brid eRectifier**  
 Reverse Voltage 50 to 1000V



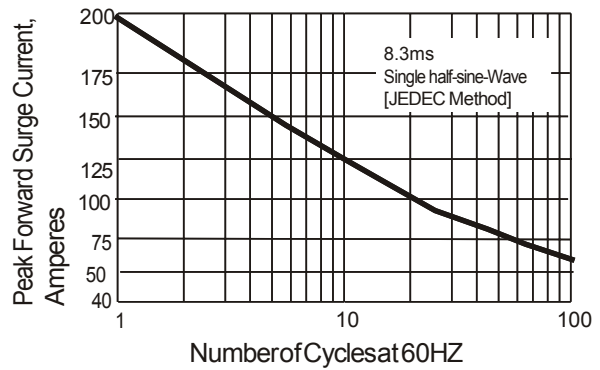
Dimensions in millimeters(1mm =0.0394")



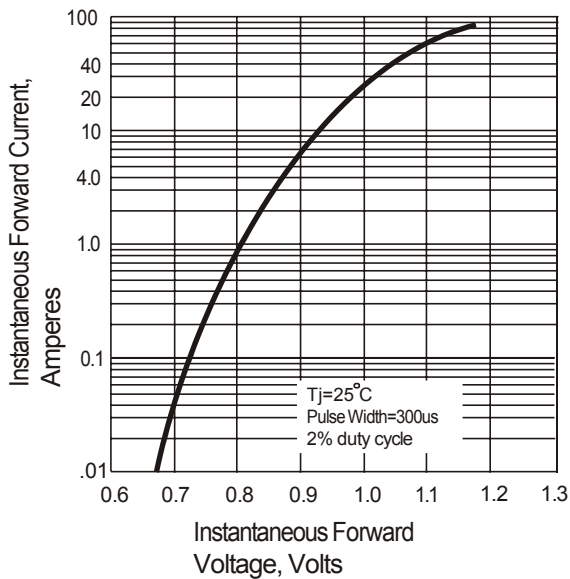
**Fig. 1 Derating Curve for Output Rectified Current**



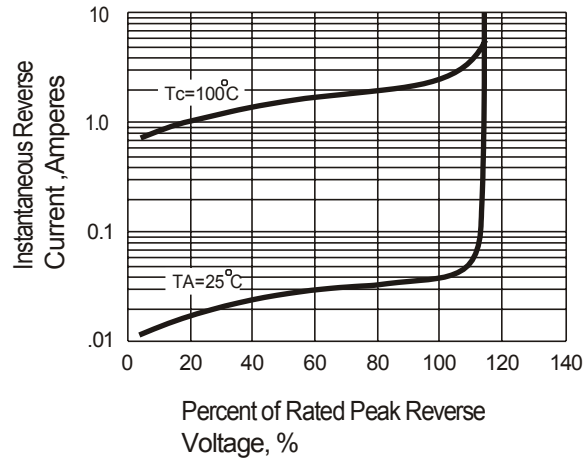
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



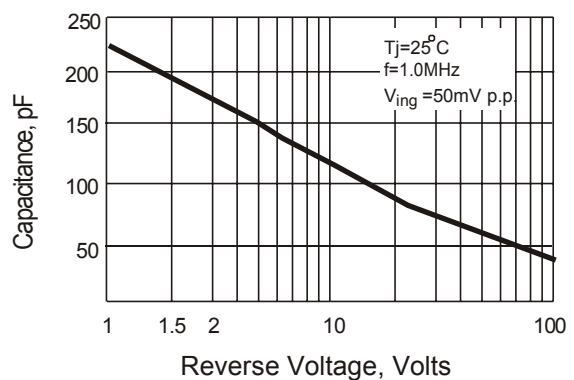
**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Reverse Characteristics**



**Fig. 5 Typical Junction Capacitance**





**注意事项**

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4. 本说明书如有版本变更不另外告知

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2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Shenzhen Huatianwei Electronics co., Ltd reserves the right to make changes in this specification sheet and is subject to change without prior notice.

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