



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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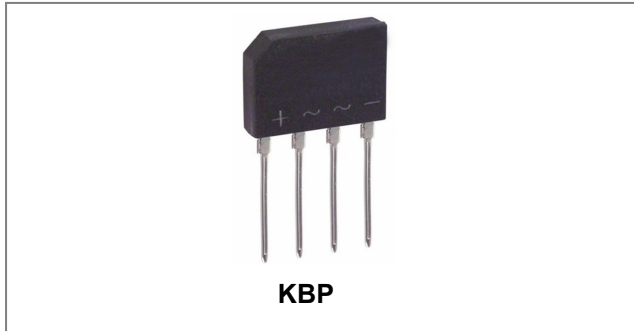
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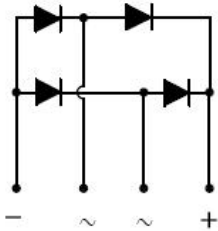
## KBP2005G THRU KBP210G SINGLE PHASE 2.0AMP GLASS PASSIVATED BRIDGE RECTIFIER



### Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Circuit Diagram



### Mechanical Data

- Case: KBP, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Lead Free: For RoHS / Lead Free Version

### Maximum Ratings: @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type number	Symbol	KBP 2005G	KBP 201G	KBP 202G	KBP 204G	KBP 206G	KBP 208G	KBP 210G	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T <sub>A</sub> =50°C	I <sub>o</sub>	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60							A

**Electrical Characteristics:**

Type Number	Symbol	KBP 2005G	KBP 201G	KBP 202G	KBP 204G	KBP 206G	KBP 208G	KBP 210G	Units
Forward Voltage per element @ $I_F=2.0A$	$V_F$	1.1							V
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$	5.0 500							$\mu A$

\* Pulse width < 300  $\mu s$ , duty cycle < 2%

**Thermal-Mechanical Specifications:**

Type Number	Symbol	KBP 2005G	KBP 201G	KBP 202G	KBP 204G	KBP 206G	KBP 208G	KBP 210G	Units
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	25							$^\circ C/W$
Typical Thermal Resistance Junction to Lead (Note 1)	$R_{\theta JL}$	8							
Junction Temperature	$T_J$	-55 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$
Approximate Weight	wt	1.4							g
Case Style		KBP							

Note: 1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

**Ratings and Characteristics Curves**

Fig. 1 Forward Current Derating Curve

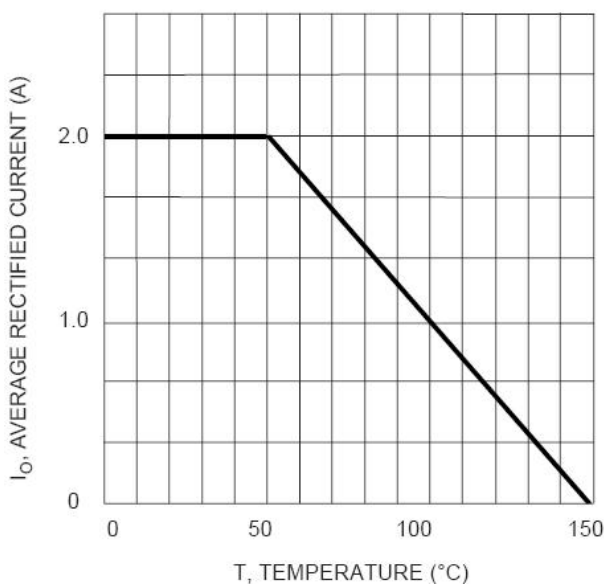


Fig. 2 Typical Fwd Characteristics

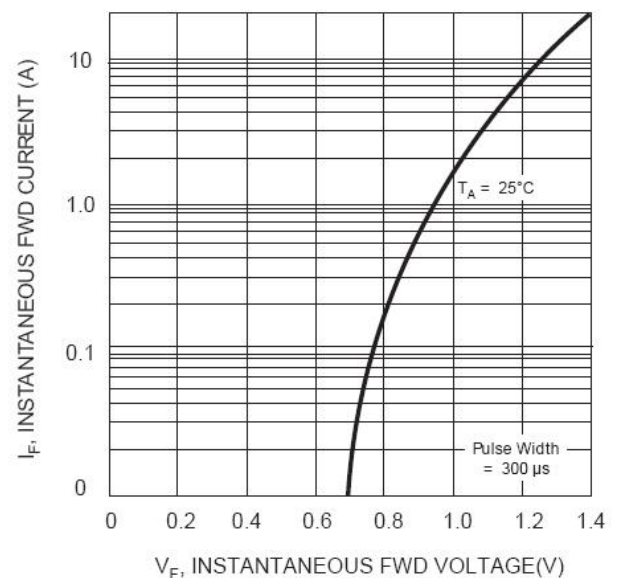


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

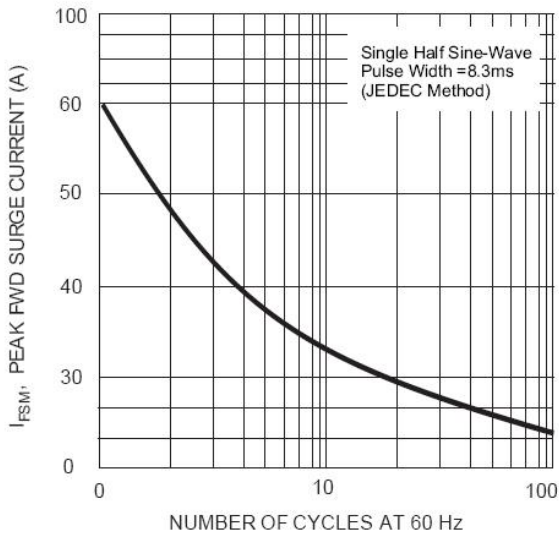


Fig. 4 Typical Junction Capacitance

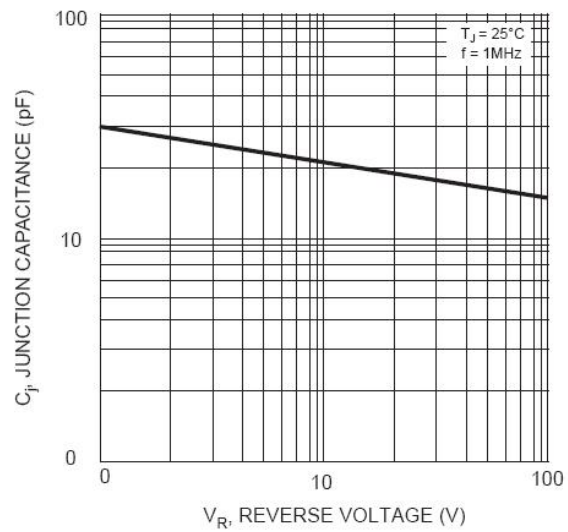
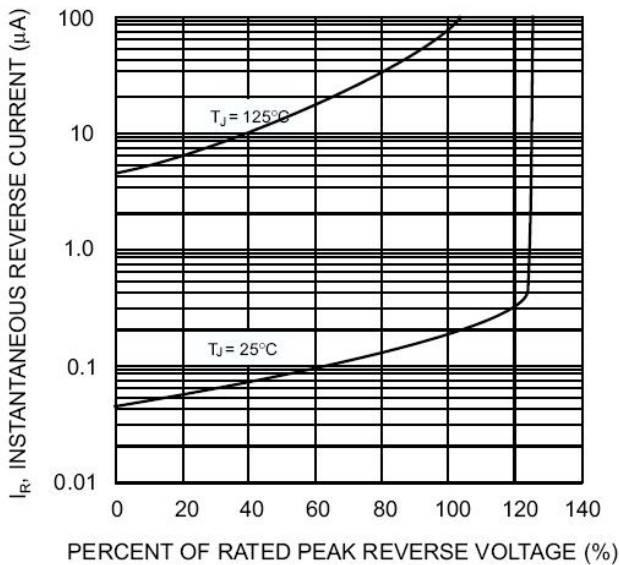


Fig. 5 Typical Reverse Characteristics (per element)

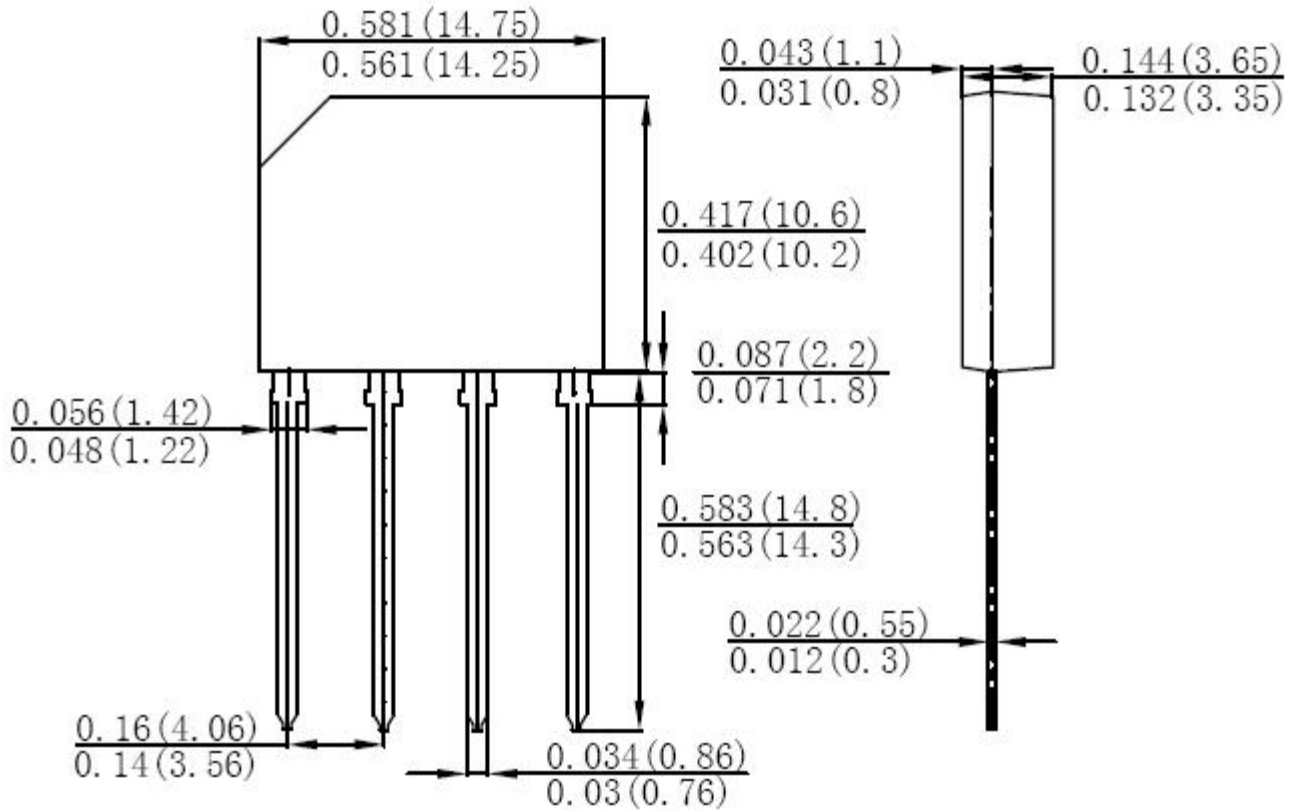


## Ordering Information

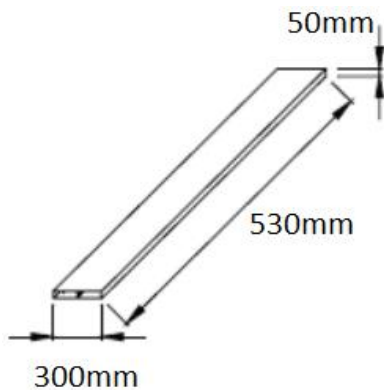
Device	Package	Plating	Shipping
KBP2005G THRU KBP210G	KBP(Pb-Free)	Pure Sn	35pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

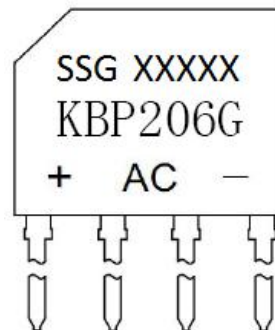
**Mechanical Dimensions KBP (Inches/Millimeters)**



**Tube Specification**



**Marking Diagram**



Where XXXXX is YYWWL

SSG = SSG  
YY = Year  
WW = Week  
L = Lot Number  
KBP206G = Type Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

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