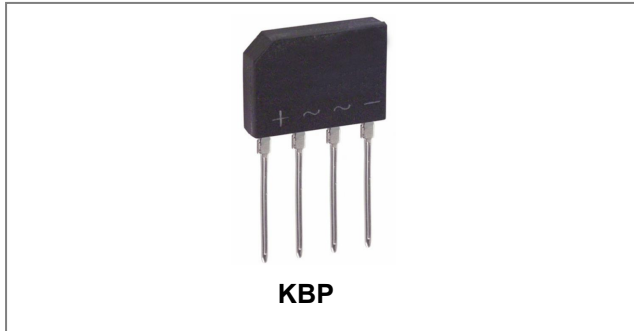


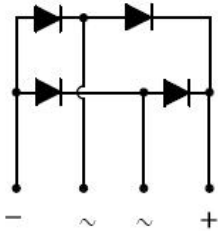
## KBP2005G THRU KBP210G SINGLE PHASE 2.0AMP GLASS PASSIVATED BRIDGE RECTIFIER



### 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

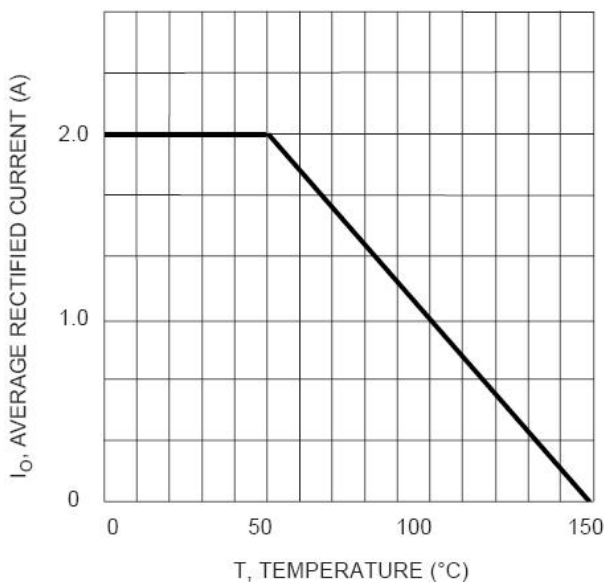


Fig. 2 Typical Fwd Characteristics

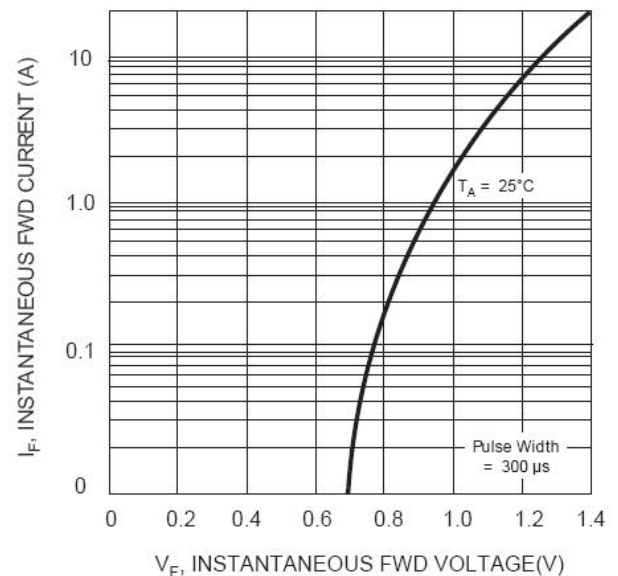


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

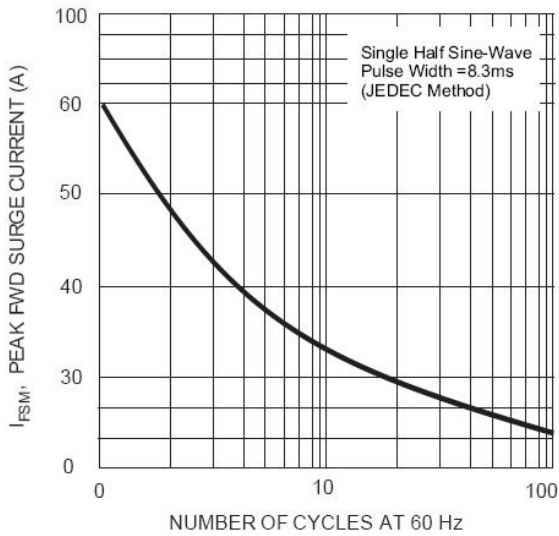


Fig. 4 Typical Junction Capacitance

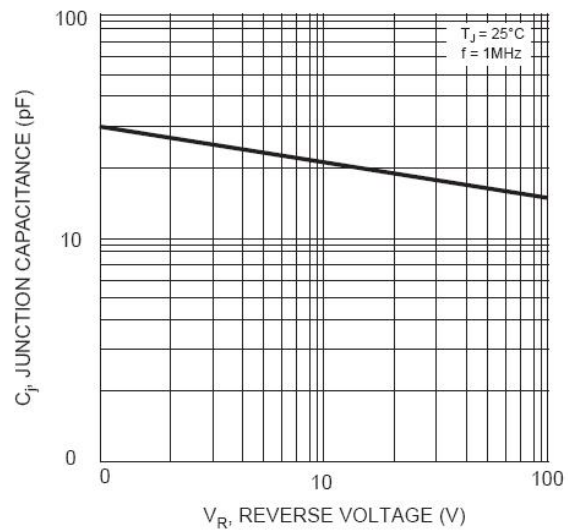
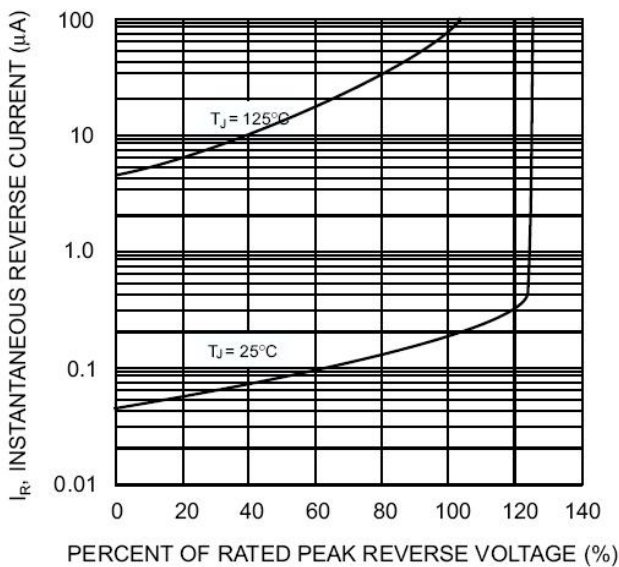


Fig. 5 Typical Reverse Characteristics (per element)

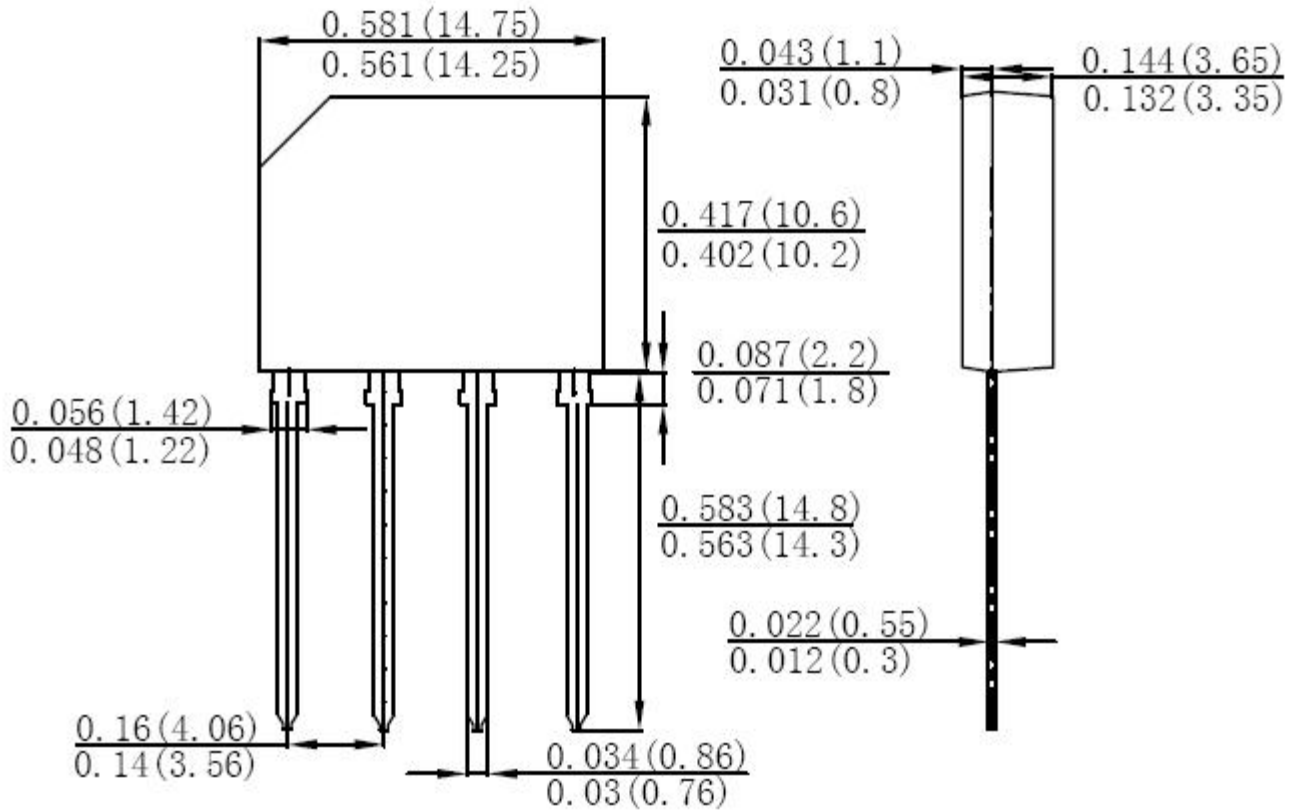


## Ordering Information

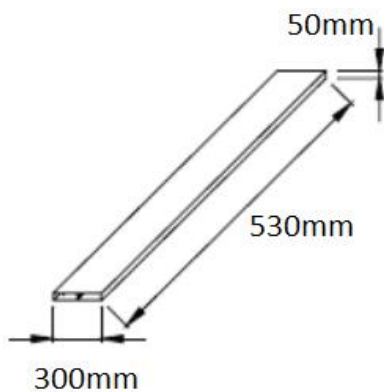
Device	Package	Plating	Shipping
KBP2005G THRU KBP210G	KBP(Pb-Free)	Pure Sn	35pcs / tube

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

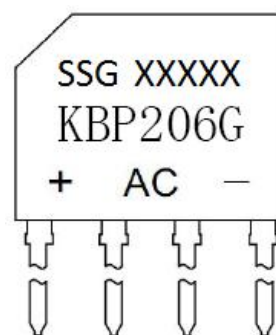
**Mechanical Dimensions KBP (Inches/Millimeters)**



**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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