



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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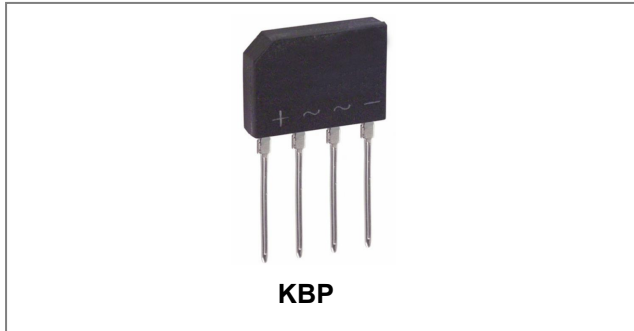
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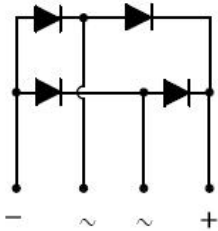
KBP3005G THRU KBP310G SINGLE PHASE 3.0AMP GLASS PASSIVATED BRIDGE RECTIFIER



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
- Weight: 1.4gram
- Lead Free: For RoHS / Lead Free Version

Maximum Ratings: @T_A=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 3005G	KBP 301G	KBP 302G	KBP 304G	KBP 306G	KBP 308G	KBP 310G	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T _A =50°C	I _o	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80							A

Electrical Characteristics: @T_A=25°C unless otherwise specified

Type Number	Symbol	KBP 3005G	KBP 301G	KBP 302G	KBP 304G	KBP 306G	KBP 308G	KBP 310G	Units
Forward Voltage per element * @I _F =3.0A	V _F	1.1							V
Peak Reverse Current * @T _A =25°C At Rated DC Blocking Voltage @T _A =125°C	I _R	5.0 500							μA

* Pulse width < 300 μs, duty cycle < 2%

Thermal-Mechanical Specifications: @T_A=25°C unless otherwise specified

Type Number	Symbol	KBP 3005G	KBP 301G	KBP 302G	KBP 304G	KBP 306G	KBP 308G	KBP 310G	Units
Typical Thermal Resistance Junction to Ambient (Note 1)	R _{θJA}	30							°C/W
Typical Thermal Resistance Junction to Lead (Note 1)	R _{θJL}	11							
Junction Temperature	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

Ratings and Characteristics Curves

Fig. 1 Forward Current Derating Curve

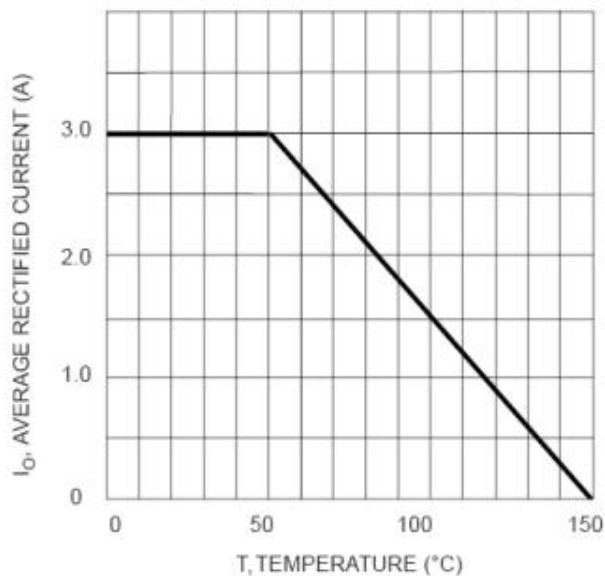


Fig. 2 Typical Fwd Characteristics

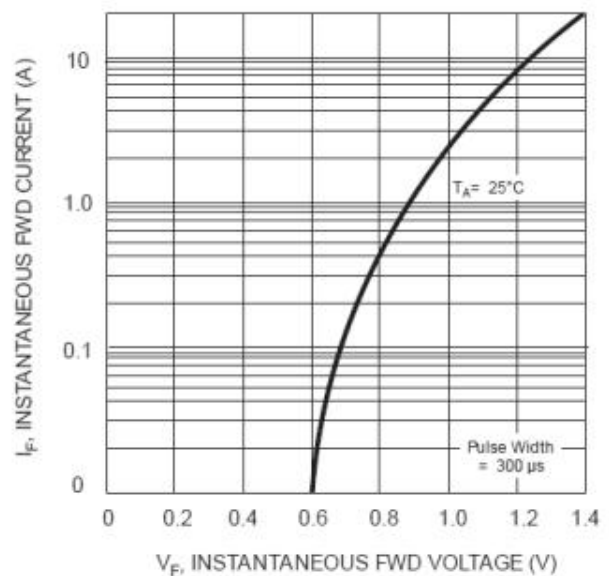


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

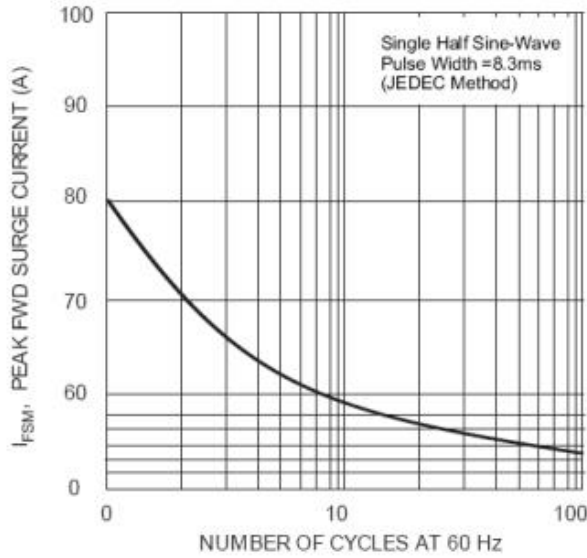


Fig. 4 Typical Junction Capacitance

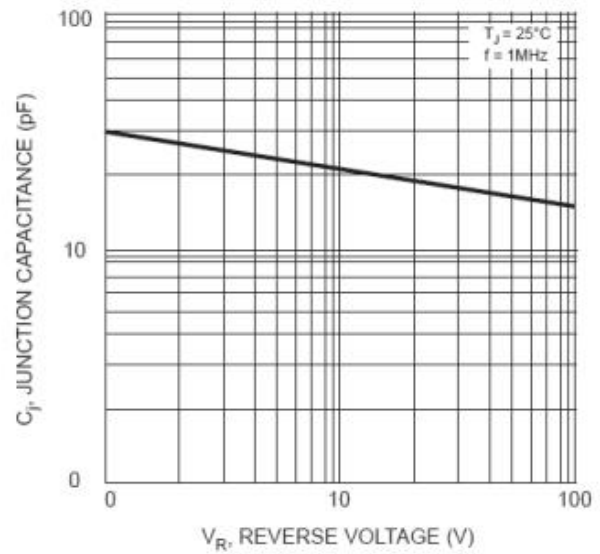
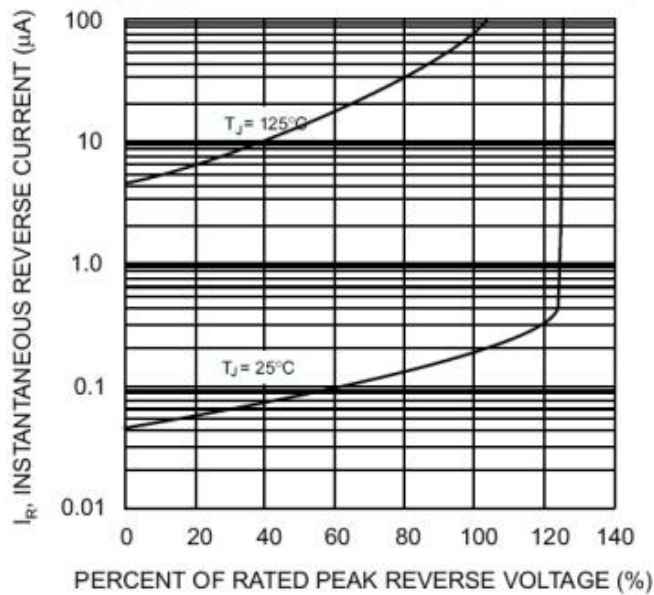


Fig. 5 Typical Reverse Characteristics (per element)

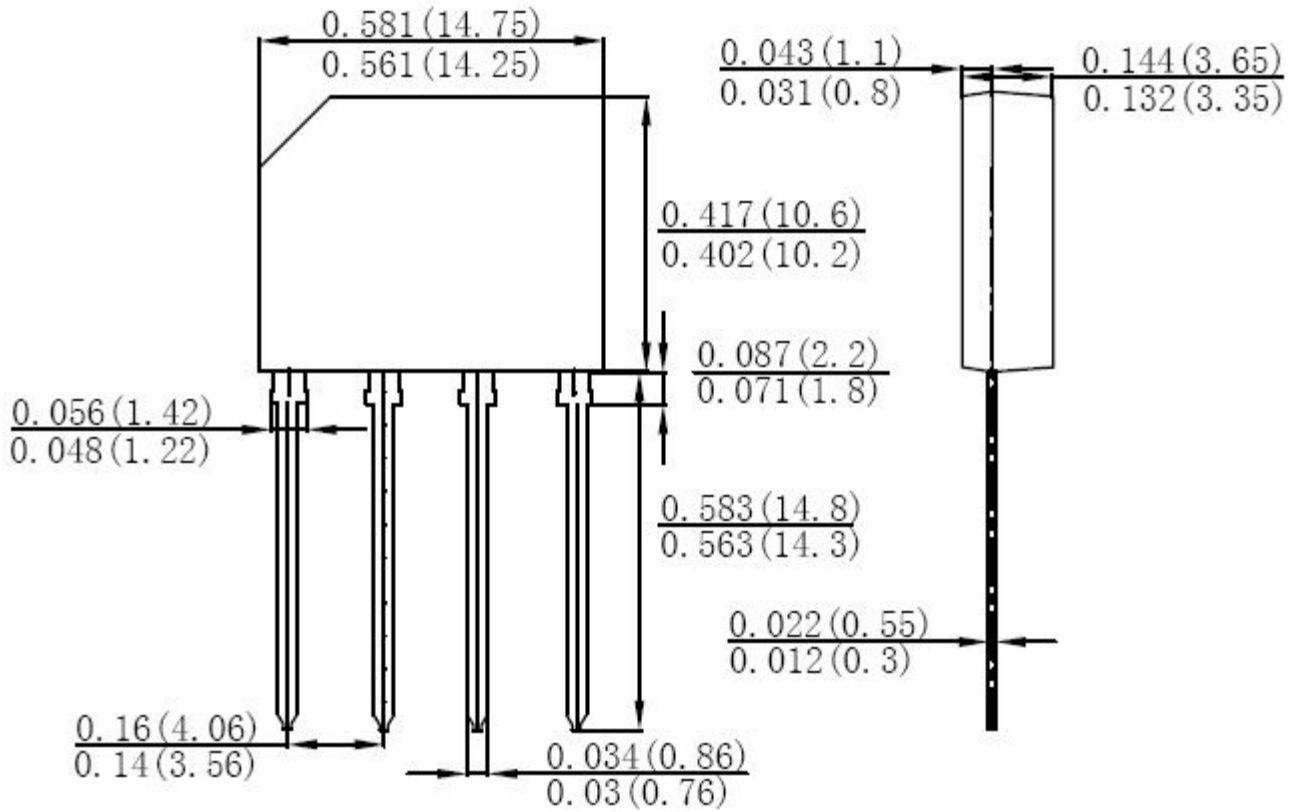


Ordering Information

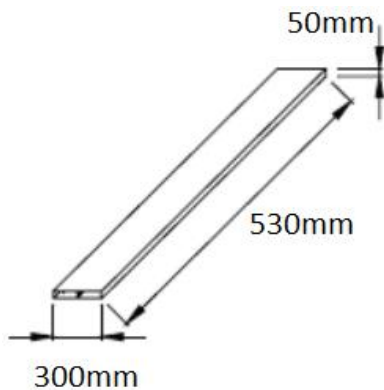
Device	Package	Plating	Shipping
KBP3005G THRU KBP310G	KBP(Pb-Free)	Pure Sn	35pcs / tube

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

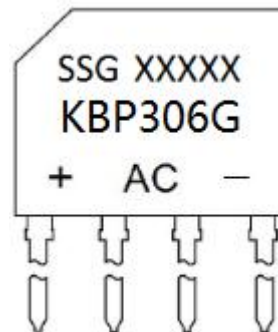
Mechanical Dimensions KBP (Inches/Millimeters)



Tube Specification



Marking Diagram



Where XXXXX is YYWWL

SSG = SSG
YY = Year
WW = Week
L = Lot Number
KBP306G = Type Number

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

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