

Technical Data Data Sheet N1746, Rev. - **Green Products** 

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

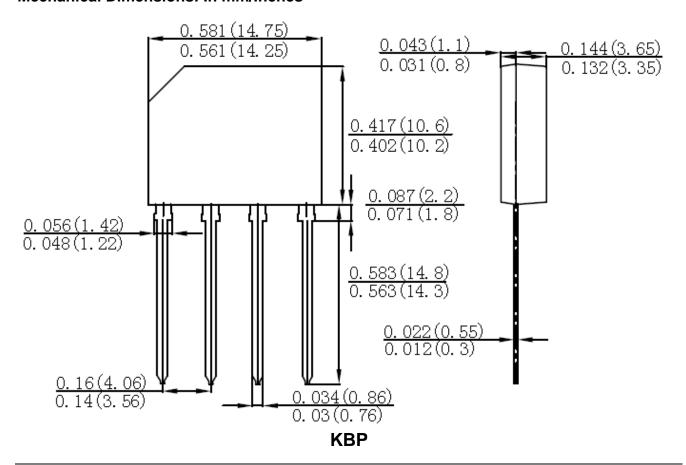
#### Features:

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

### **Mechanical Data:**

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

### Mechanical Dimensions: In mm/Inches



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## Maximum Ratings and Electrical Characteristics @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		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 (Note 1) @ T <sub>A</sub> =50 ℃	I <sub>o</sub>	2.0							Α
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60							Α
Forward Voltage per element @I <sub>F</sub> =2.0A	V <sub>F</sub>	1.1							٧
Peak Reverse Current @T <sub>A</sub> =25°C At Rated DC Blocking Voltage @T <sub>A</sub> =125°C	I <sub>R</sub>	5.0 500							μA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	25							°C/W
	R <sub>θJL</sub>	8							
Junction Temperature	TJ	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

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

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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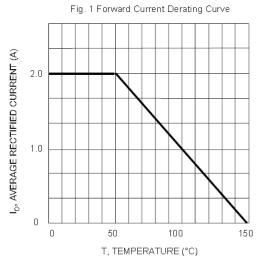


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

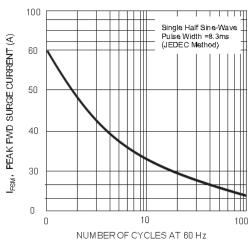
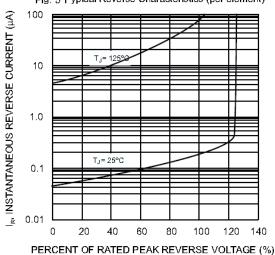


Fig. 5 T ypical Reverse Characteristics (per element)



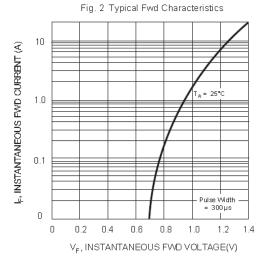
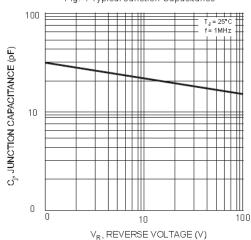


Fig. 4 Typical Junction Capacitance



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