

<u> KBP005G - KBP10G</u>

1.5A GLASS PASSIVATED BRIDGE RECTIFIER

#### Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V<sub>RMS</sub>
- Low Reverse Leakage Current
- Surge Overload Rating to 40A Peak
- Ideal for Printed Circuit Board Applications
- UL Listed Under Recognized Component Index, File
  Number E94661
- Lead Free Finish, RoHS Compliant (Note 2)

## **Mechanical Data**

- Case: KBP
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Finish Matte Tin. Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Marking: Type Number
- Weight: 1.52 grams (approximate)



KBP							
Dim	Min	Мах					
Α	14.25	14.75					
в	10.20	10.60					
С	2.29 Typical						
D	14.25	14.73					
Е	3.56	4.06					
G	0.76	0.86					
н	1.17	1.42					
J	2.8 X 45° Chamfer						
К	0.80	1.10					
L	3.35	3.65					
М	3° Nominal						
Ν	2° Nominal						
Р	0.30	0.64					
All Dimensions in mm							

# **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%.

Characteristic		Symbol	KBP 005G	KBP 01G	KBP 02G	KBP 04G	KBP 06G	KBP 08G	KBP 10G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>RWM</sub> VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current	@ T <sub>C</sub> = 105°C	lo				1.5				Α
Non-Repetitive Peak Forward Surge Current, 8.3 r Single Half Sine-Wave Superimposed on Rated Lo		I <sub>FSM</sub>				40				А
Forward Voltage per element	@ I <sub>F</sub> = 1.5A	V <sub>FM</sub>				1.1				V
Peak Reverse Current at Rated DC Blocking Voltage	@T <sub>C</sub> = 25°C @T <sub>C</sub> = 125°C	DM		5.0 500					μA	
Typical Total Capacitance per (Note 1)		CT	20					pF		
Typical Thermal Resistance, Junction to Case		$R_{\theta JC}$	18					°C/W		
Operating and Storage Temperature Range		T <sub>J</sub> , T <sub>STG</sub>	-65 to +150						°C	

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. RoHS revision 13.2.2003. Glass and high temperature solder exemptions applied, see EU Directive Annex Notes 5 and 7.

3. Unit mounted on 300 x 300 x 1.6mm aluminum plate heat sink.









## Ordering Information (Note 4)

Device	Packaging	Shipping			
KBP005G	KBP	35 pieces per Tube			
KBP01G	KBP	35 pieces per Tube			
KBP02G	KBP	35 pieces per Tube			
KBP04G	KBP	35 pieces per Tube			
KBP06G	KBP	35 pieces per Tube			
KBP08G	KBP	35 pieces per Tube			
KBP10G	KBP	35 pieces per Tube			

Notes: 4. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

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