

**FL** E502650

#### **Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 2)
- Epoxy Meets UL 94 V-0 Flammability Rating
- · Moisture Sensitivity Level 1
- High Reliability

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance(Note 3): 11 °C/W Junction To Lead
- Thermal Resistance(Note 3): 30 °C/W Junction To Ambient

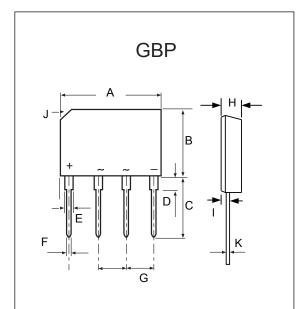
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KBP3005G	KBP3005G	50V	35V	50V
KBP301G	KBP301G	100V	70V	100V
KBP302G	KBP302G	200V	140V	200V
KBP304G	KBP304G	400V	280V	400V
KBP306G	KBP306G	600V	420V	600V
KBP308G	KBP308G	800V	560V	800V
KBP310G	KBP310G	1000V	700V	1000V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

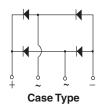
Average Forward Current	I <sub>F(AV)</sub>	3.0A	T <sub>A</sub> = 55°C	
Peak Forward Surge Current	I <sub>FSM</sub>	80A	8.3ms, Half Sine	
Maximum Forward Voltage Drop Per Element	V <sub>F</sub>	1.1V	$I_{FM}$ = 2.0A Per Element; $T_J$ = 25°C	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10µA 1mA	T <sub>J</sub> = 25°C T <sub>J</sub> = 100°C	
Rating for Fusing	I <sup>2</sup> t	26 A <sup>2</sup> s	t<8.3ms	

- Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a
  - 2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
  - 3. Thermal Resistance From Junction to Ambint and Junction to Lead Mounted on P.C.B. With,0.59 X 0.59"(15 X 15mm) Copper Pads.

# 3 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts



DIMENSIONS							
DIM	INCHES		MM		NOTE		
	MIN	MAX	MIN	MAX	NOTE		
Α	0.561	0.580	14.25	14.75			
В	0.406	0.417	10.10	10.60			
С	0.561	0.581	14.25	14.73			
D	0.071	0.087	1.80	2.20			
Е	0.046	0.056	1.17	1.42			
F	0.030	0.034	0.76	0.86			
G	0.140	0.160	3.56	4.06			
Н	0.131	0.161	3.35	4.10			
- 1	0.031	0.043	0.80	1.10			
J	0.106 X 45°		2.70 X 45°				
K	0.012	0.025	0.30	0.64			





### **Curve Characteristics**

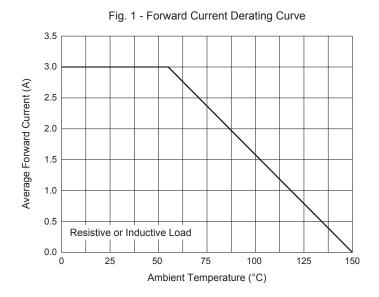
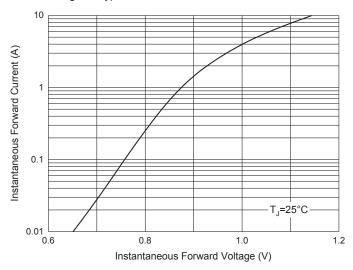


Fig. 3 - Typical Instantaneous Forward Characteristics



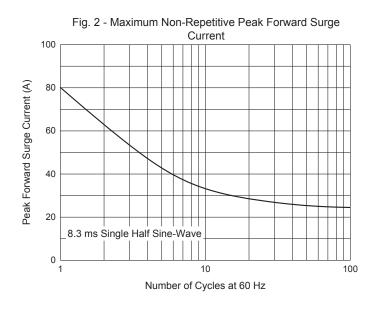
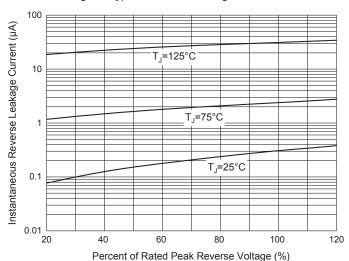


Fig. 4 - Typical Reverse Leakage Characteristics



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