

**KBP3005G  
THRU  
KBP310G**

## Features

- Surge overload ratings 80 amperes peak
- High Reliability
- Ideal for printed circuit board
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

## Maximum Ratings

- $I^2t$  Rating for Fusing( $t < 8.3\text{ms}$ ): 26 A<sup>2</sup>s
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

MCC Catalog 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

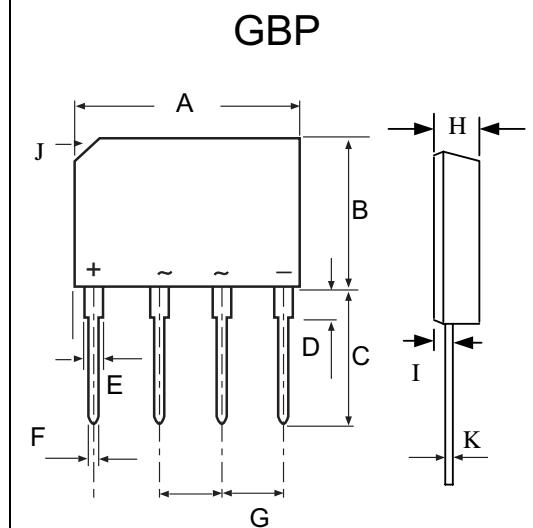
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	80A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.1V	$I_{FM} = 2.0\text{A}$ per element; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	$10\mu\text{A}$ 1mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Thermal Resistance(note 2)	$R_{thJA}$ $R_{thJL}$	$30^\circ\text{C/W}$ $11^\circ\text{C/W}$	

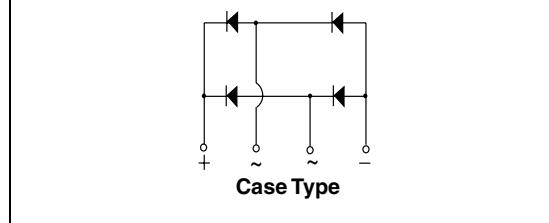
Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a

2. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.59 X 0.59" (15 X 15mm) copper pads.

**3 Amp  
Bridge Rectifier  
50 to 1000 Volts**

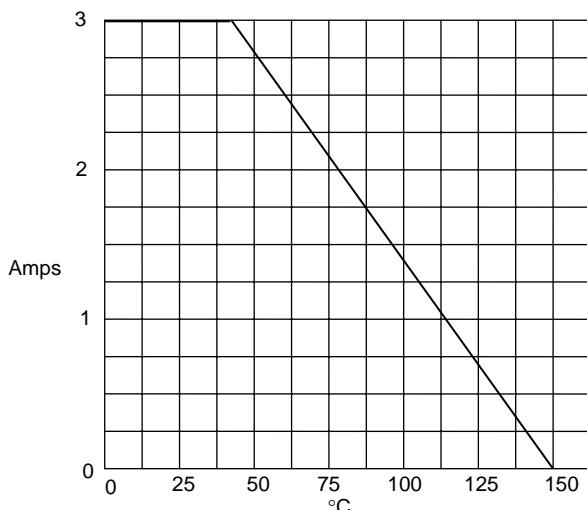


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.561	.580	14.25	14.75	
B	.410	.417	10.20	10.60	
C	.561	.581	14.25	14.73	
D	.090		2.29		
E	.046	.056	1.17	1.42	
F	.030	.034	0.76	0.86	
G	.140	.160	3.56	4.06	
H	.138	.161	3.50	4.10	
I	.045	.060	1.14	1.52	
J	.110 x 45°		2.80 x 45°		
K	.012	.025	.300	.641	



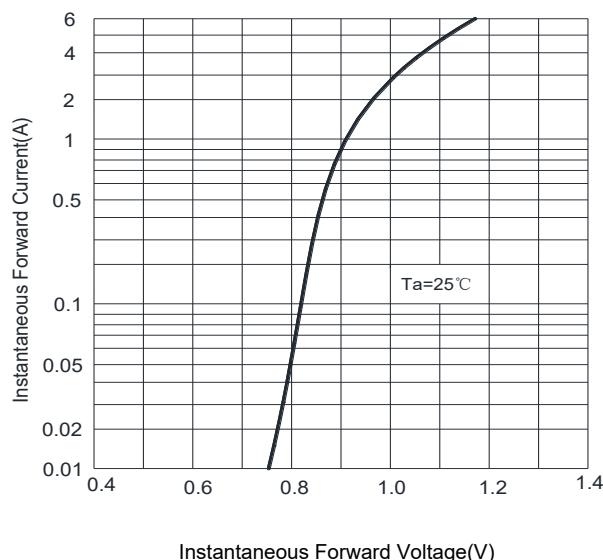
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Figure 1  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 2  
Forward Voltage



Instantaneous Forward Voltage(V)

Figure 3  
Typical Reverse Characteristics

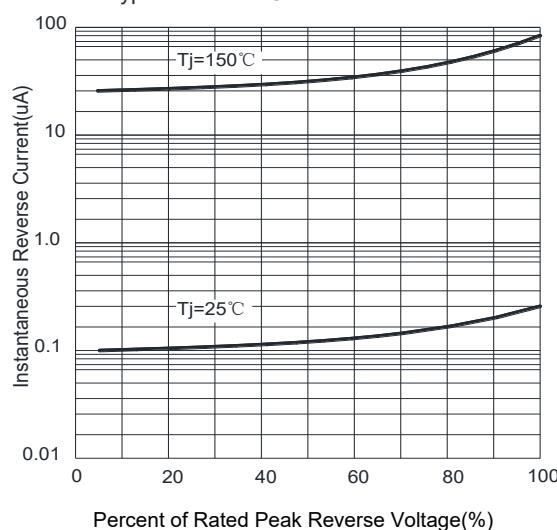
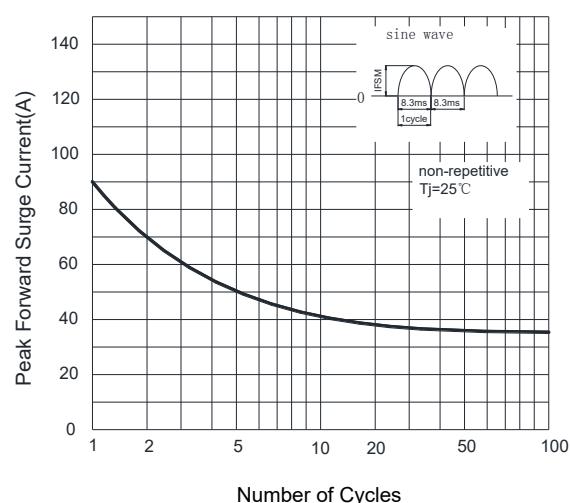


Figure 4  
Surge Forward Current Capability



Number of Cycles



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## Ordering Information

Device	Packing
(Part Number)-BP	Bulk: 4.2Kpcs/Ctn;

Note : Adding "+HF" suffix for halogen free, eg. Part Number-BP-HF

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