



Micro Commercial Components

Micro Commercial Components  
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# KBJ10005G THRU KBJ1010G

**10 Amp  
GLASS PASSIVATED  
BRIDGE RECTIFIERS  
50 to 1000 Volts**

## Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- 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 (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)

## Maximum Ratings

- Operating Junction Temperature: -55°C to + 150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

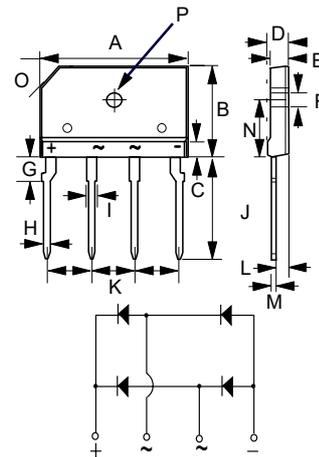
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KBJ10005G	KBJ10005G	50V	35V	50V
KBJ1001G	KBJ1001G	100V	70V	100V
KBJ1002G	KBJ1002G	200V	140V	200V
KBJ1004G	KBJ1004G	400V	280V	400V
KBJ1006G	KBJ1006G	600V	420V	600V
KBJ1008G	KBJ1008G	800V	560V	800V
KBJ1010G	KBJ1010G	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	170A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.0V	$I_{FM} = 5.0\text{A}$ per element; $T_A = 25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
$I^2t$ Rating for fusing	$I^2t$	120 $\text{A}^2\text{S}$	( $t < 8.3\text{ms}$ )

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a  
2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

## KBJ



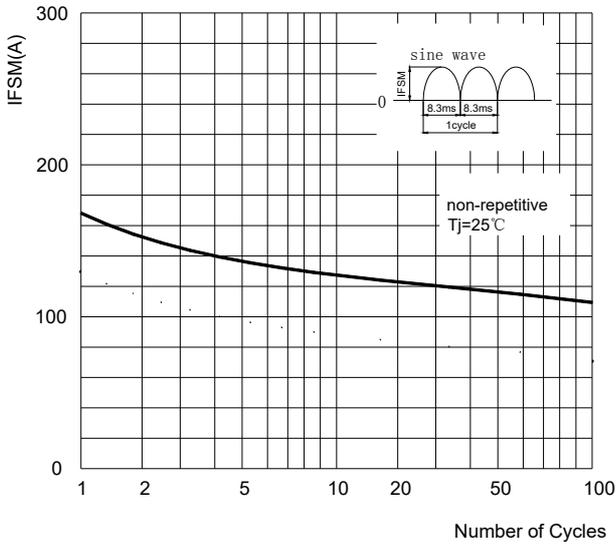
Case Type

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.976	.992	24.80	25.20	
B	.579	.602	14.70	15.30	
C	.154	.161	3.90	4.10	
D	.173	.189	4.40	4.80	
E	.134	.150	3.40	3.80	
F	.122	.134	3.10	3.40	∅
G	.130	.146	3.30	3.70	
H	.035	.043	0.90	1.10	
I	.059	.075	1.50	1.90	
J	.669	.709	17.00	18.00	
K	.287	.303	7.30	7.70	
L	.098	.114	2.50	2.90	
M	.024	.031	0.60	0.80	
N	.366	.413	9.30	10.50	
O	.118X45°		3.0X45°		
P	.122	.134	3.10	3.40	∅

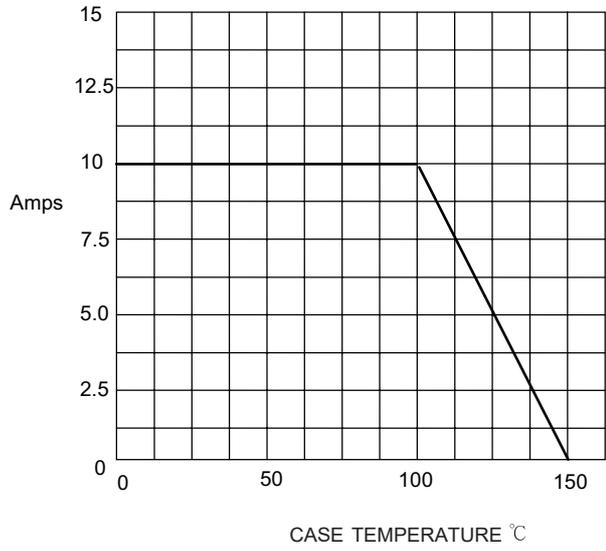
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## Rating and characteristic curves

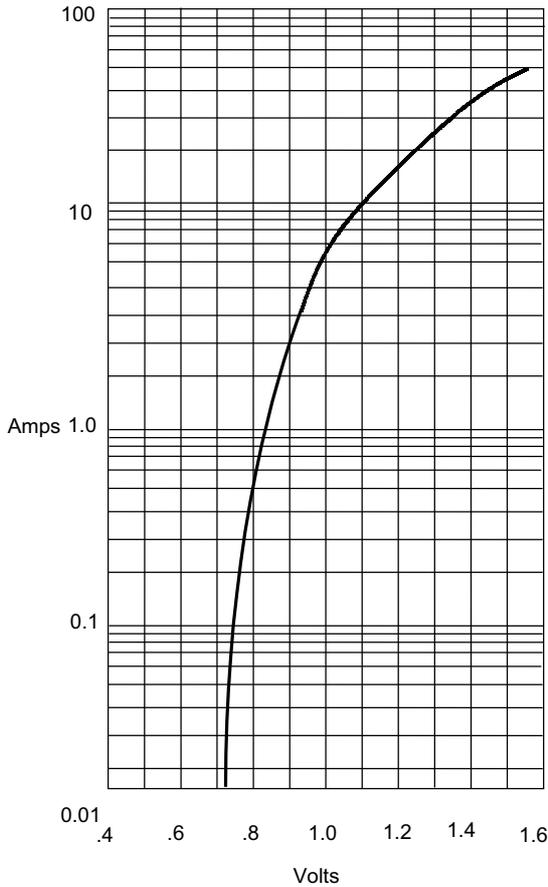
**Figure1**  
Surge Forward Current Capadity



**Figure2**  
Derating Curve Output Rectified Current

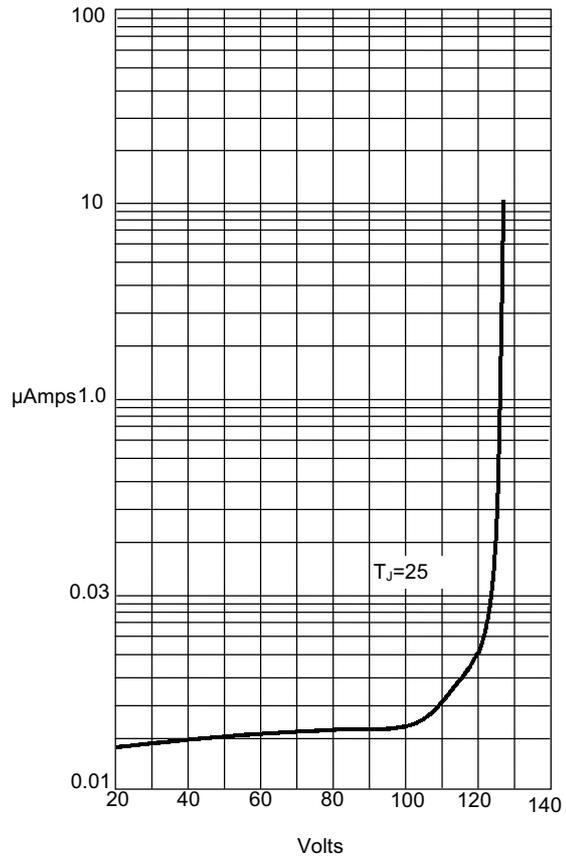


**Figure 3**  
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

**Figure 4**  
Typical Reverse Characteristics



Instantaneous Reverse Current - MicroAmperes versus  
Percent of Rated Peak Reverse Voltage - Volts(%)



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## Ordering Information :

Device	Packing
Part Number-BP	Bulk: 15Pcs/Tube

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

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