

**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 Fax:

# **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 Rœurrent 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

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Average Forward Current	$I_{F(AV)}$	10A	$T_{C} = 100^{\circ}C$	
Peak Forward Surge Current	I <sub>FSM</sub>	120A	8.3ms, half sine	
Maximum Forward Voltage Drop Per Element	$V_{F}$	1.1V	$I_{FM}$ = 5.0A per element; $T_A$ = 25°C (Note 2)	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μΑ	T <sub>A</sub> = 25°C	
I <sup>2</sup> t Rating for fusing	l <sup>2</sup> t	60A <sup>2</sup> S	(t<8.3ms)	

1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

# **KBJ**

### **Case Type**

DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.976	.992	24.80	25.20		
В	.579	.602	14.70	15.30		
С	.154	.161	3.90	4.10		
D	.173	.189	4.40	4.80		
Е	.134	.150	3.40	3.80		
F	.122	.134	3.10	3.40	Ø	
G	.130	.146	3.30	3.70		
Н	.035	.043	0.90	1.10		
	.059	.075	1.50	1.90		
J	.677	.700	17.20	17.80		
K	.287	.303	7.30	7.70		
L	.098	.114	2.50	2.90		
M	.024	.031	0.60	0.80		
N	.366	.381	9.30	9.70		
0	.118X45°		3.0X45°			
Р	.122	.134	3.10	3.40	Ø	

### KBJ10005G THRU KBJ1010G

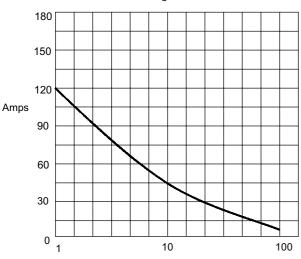
## Rating and characteristic curves



### **Micro Commercial Components**

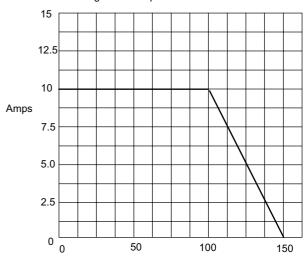
Figure1

Maximum Forward Surge Current



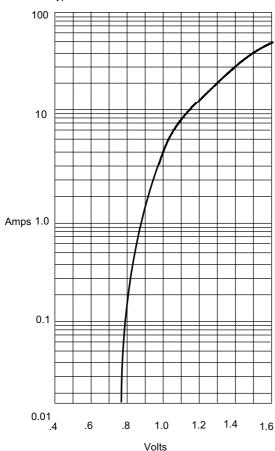
Peak Forward Surge Current - Amperes *versus* Number of Cycles At 60 Hz

Figure2
Derating Curve Output Rectified Current



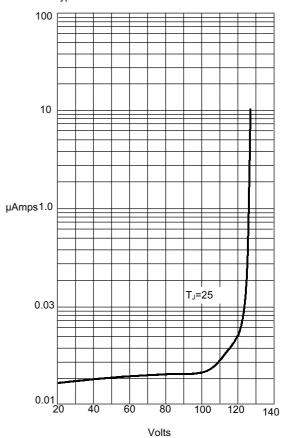
CASE TEMPERATURE2 °C

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



### **Micro Commercial Components**

### **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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