

Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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

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	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak	Voltage	Blocking
	Or	Reverse	Oto	Voltage
		Voltage		1.51
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

Flectrical Characteristics @ 25°C Unless Atherwise Specified

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Average Forward Current	I _{F(AV)}	10A	$T_{C} = 100^{\circ}C$	
Peak Forward Surge Current	I _{FSM}	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 _R	10μΑ	T _A = 25°C	
I ² t Rating for fusing	l ² t	60A ² 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

NCHES MM NOTE	DIMENSIONS					
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 Ø G .130 .146 3.30 3.70 H .035 .043 0.90 1.10 I .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 O .118X45° 3.0X45°		INCHES		ММ		
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 Ø .340 .360 G .130 .146 3.30 3.70 H .035 .043 0.90 1.10 .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 .	DIM	MIN	MAX	MIN	MAX	NOTE
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 Ø G .130 .146 3.30 3.70 H .035 .043 0.90 1.10 I .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 O .118X45° 3.0X45°	Α	.976	.992	24.80	25.20	
D .173 .189 4.40 4.80 E .134 .150 3.40 3.80 F .122 .134 3.10 3.40 Ø G .130 .146 3.30 3.70 H .035 .043 0.90 1.10 I .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 O .118X45° 3.0X45°	В	.579	.602	14.70	15.30	
E .134 .150 3.40 3.80 F .122 .134 3.10 3.40 Ø .6 .130 .146 3.30 3.70 H .035 .043 0.90 1.10 .10 .11 .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 O .118X45° 3.0X45°	С	.154	.161	3.90	4.10	
F .122 .134 3.10 3.40 Ø G .130 .146 3.30 3.70 H .035 .043 0.90 1.10 I .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 O .118X45° 3.0X45°	D	.173	.189	4.40	4.80	
G .130 .146 3.30 3.70 H .035 .043 0.90 1.10 I .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 O .118X45° 3.0X45°	Е	.134	.150	3.40	3.80	
H .035 .043 0.90 1.10 I .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 O .118X45° 3.0X45°	F	.122	.134	3.10	3.40	Ø
1	G	.130	.146	3.30	3.70	
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 O .118X45° 3.0X45°	Н	.035	.043	0.90	1.10	
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 O .118X45° 3.0X45°	ı	.059	.075	1.50	1.90	
L .098 .114 2.50 2.90 M .024 .031 0.60 0.80 N .366 .381 9.30 9.70 O .118X45° 3.0X45°	J	.677	.700	17.20	17.80	
M .024 .031 0.60 0.80 N .366 .381 9.30 9.70 O .118X45° 3.0X45°	K	.287	.303	7.30	7.70	
N .366 .381 9.30 9.70 O .118X45° 3.0X45°	L	.098	.114	2.50	2.90	
O .118X45° 3.0X45°	M	.024	.031	0.60	0.80	
	N	.366	.381	9.30	9.70	
	0	.118X45°		3.0X45°		
1 1.122 1.134 3.10 3.40 \$2	Р	.122	.134	3.10	3.40	Ø

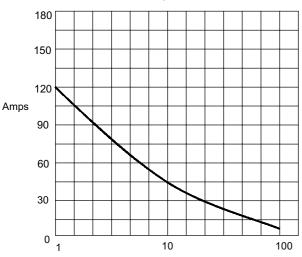
KBJ10005G THRU KBJ1010G

Rating and characteristic curves



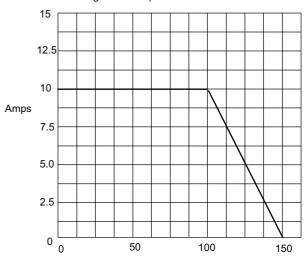
Micro Commercial Components





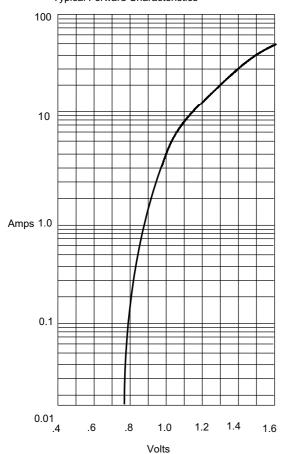
Peak Forward Surge Current - Amperes *versus* Number of Cycles At 60 Hz

Figure2
Derating Curve Output Rectified Current



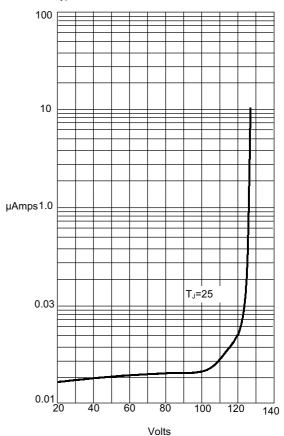
CASE TEMPERATURE2 °C

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



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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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