

AI.

E502650

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Low Forward Voltage Drop and High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note 2): 1.5°C/W Junction to Case
- ESD Voltage: HBM: 4KV; MM: 400V; CDM: 800V

## **Mechanical Data**

• Mounting Torque: 0.5 in-lbs Maximum

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KBJ6005G	KBJ6005G	50V	35V	50V
KBJ601G	KBJ601G	100V	70V	100V
KBJ602G	KBJ602G	200V	140V	200V
KBJ604G	KBJ604G	400V	280V	400V
KBJ606G	KBJ606G	600V	420V	600V
KBJ608G	KBJ608G	800V	560V	800V
KBJ610G	KBJ610G	1000V	700V	1000V

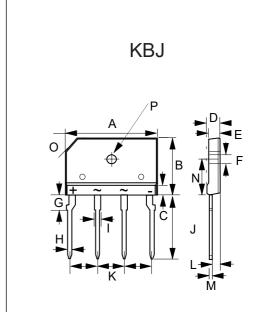
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Average Forward Rectified Current @T <sub>C</sub> =110°C	I <sub>F(AV)</sub>	6.0A 2.8A	With Heatsink <sup>(Note 2)</sup> Without Heatsink	
Peak Forward Surge Current	I <sub>FSM</sub>	170A	8.3ms, Half Sine	
Maximum Forward Voltage	V <sub>F</sub>	1.0V	I <sub>FM</sub> = 3.0A; T <sub>J</sub> = 25°C	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 500μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C	
I <sup>2</sup> t Rating for Fusing	l <sup>2</sup> t	120A <sup>2</sup> S	t<8.3ms	
Typical Junction Capacitance	СЈ	80pF	Measured at F=1.0MH <sub>Z</sub> V <sub>R</sub> =4.0V	

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

2. Unit Mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

# 6 Amp Glass Passivated Bridge Rectifiers 50 to 1000 Volts



	DIMENSIONS				
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.976	0.992	24.80	25.20	
В	0.579	0.602	14.70	15.30	
С	0.154	0.161	3.90	4.10	
D	0.173	0.189	4.40	4.80	
E	0.134	0.150	3.40	3.80	
F	0.122	0.134	3.10	3.40	Ф
G	0.130	0.146	3.30	3.70	
Н	0.035	0.043	0.90	1.10	
I	0.059	0.075	1.50	1.90	
J	0.669	0.709	17.00	18.00	
K	0.287	0.303	7.30	7.70	
L	0.098	0.114	2.50	2.90	
M	0.024	0.031	0.60	0.80	
N	0.366	0.413	9.30	10.50	
0	0.118	X 45°	3.0 2	K 45°	
Р	0.122	0.134	3.10	3.40	Ф



## **Curve Characteristics**

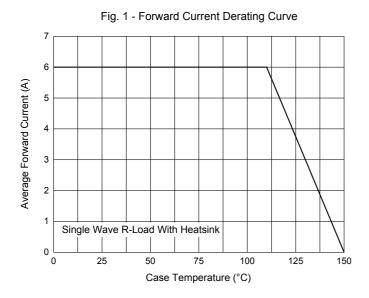


Fig. 3 - Typical Instantaneous Forward Characteristics

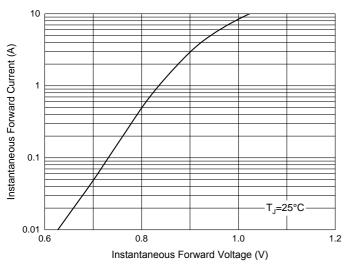


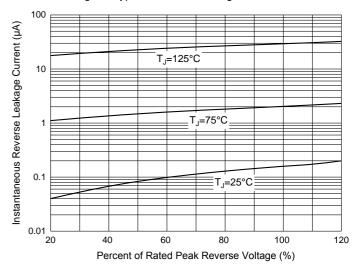
Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

150

8.3 ms Single Half Sine-Wave

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing	
Part Number-BP	Bulk:20pcs/Tube,1Kpcs/Box,2Kpcs/Carton	

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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