

	E502650
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Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/Rohs Compliant (Note2) ("P" Suffix Designates Compliant. See Ordering Information)
- Low Forward Voltage Drop, High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 1.0°C/W Junction to Case (Note3)
- Typical Thermal Resistance: 22°C/W Junction to Ambient Without Heatsink

Mechanical Data

- Mounting Torque: 5in-lbs

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJ5006L	GBJ5006L	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

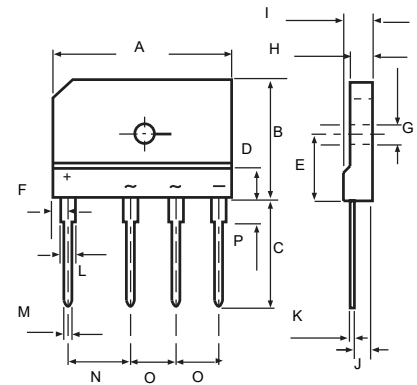
Average Forward Current	$I_{F(AV)}$	50A	$T_C = 87^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	420A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.935V(Typ) 0.97V(Max)	$I_{FM} = 25A; T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5µA	$T_J = 25^\circ\text{C}$
Rating for Fusing	I^2t	732 A ² s	$t < 8.3\text{ms}$

Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High temperature solder exemption applied, see EU directive annex 7a.
3. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

**50 Amp Low VF
Glass Passivated
Bridge Rectifier
600 Volts**

GBJ



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.170	1.190	29.70	30.30	
B	0.780	0.800	19.70	20.30	
C	0.670	0.710	17.00	18.00	
D	0.190	0.190	4.70	4.90	
E	0.430	0.440	10.80	11.20	
F	0.090	0.110	2.30	2.70	
G	0.120	0.130	3.10	3.40	
H	0.130	0.150	3.40	3.80	
I	0.170	0.190	4.40	4.80	
J	0.100	0.110	2.50	2.90	
K	0.020	0.030	0.60	0.80	
L	0.080	0.090	2.00	2.40	
M	0.040	0.040	0.90	1.10	
N	0.390	0.400	9.80	10.20	
O	0.290	0.300	7.30	7.70	
P	0.150	0.170	3.80	4.20	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

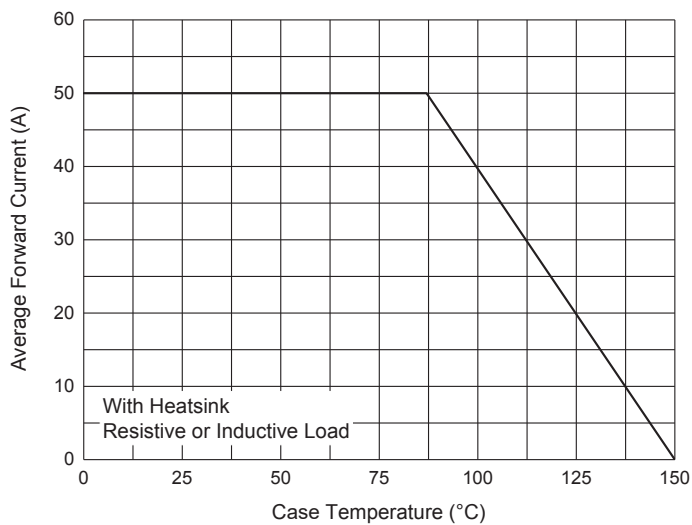


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

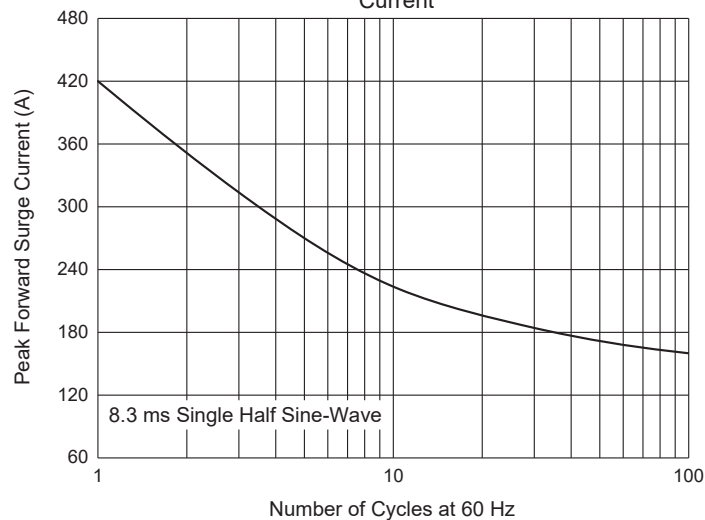


Fig. 3 - Typical Instantaneous Forward Characteristics

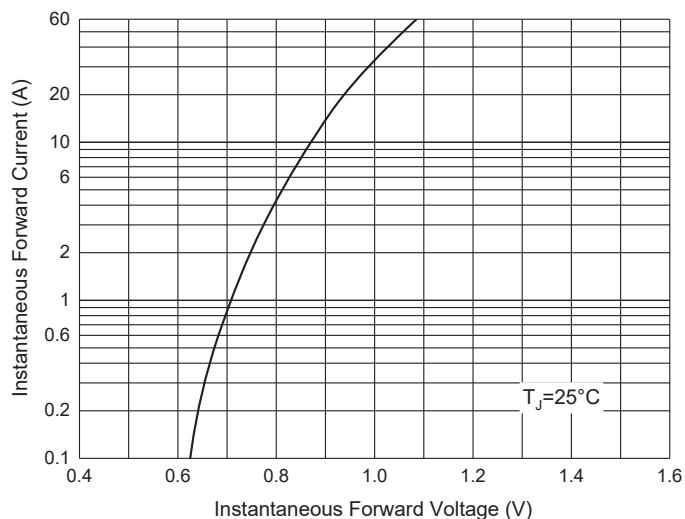
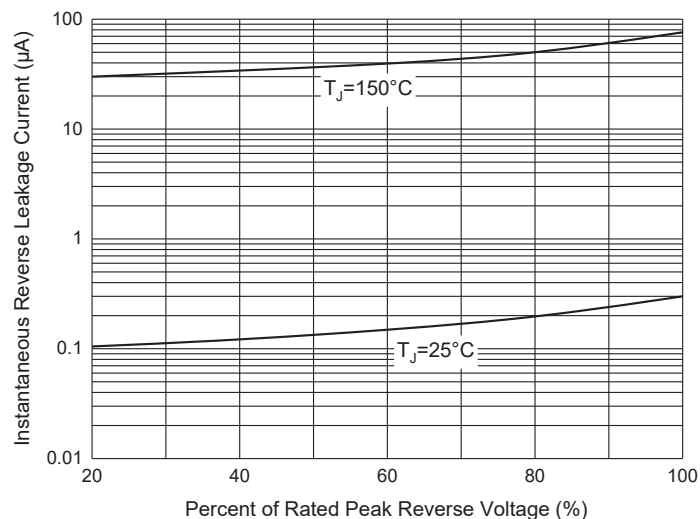


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:15pcs/Tube,750pcs/Box,1500pcs/Carton

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