

	E502650
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Features

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

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 1°C/W Junction to Case (Note2)
- Typical Thermal Resistance: 22°C/W Junction to Ambient

Mechanical Data

- Mounting Torque: 5in-lbs

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJ25L06	GBJ25L06	600V	420V	600V

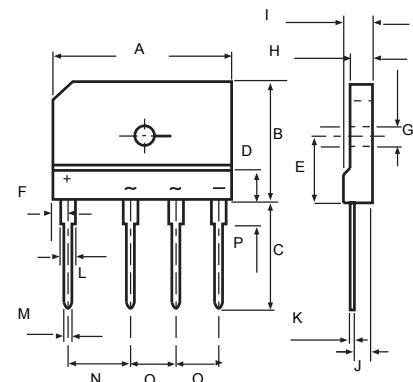
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25A 3.5A	$T_C=115^\circ\text{C}$, With Heatsink $T_A=25^\circ\text{C}$, Without Heatsink
Peak Forward Surge Current	I_{FSM}	320A 640A	8.3ms, Half Sine Wave 1.0ms, Square Wave
Current Squared Time	I^2t	425A ² s	$1\text{ms} \leq t < 8.3\text{ms}$, $T_J=25^\circ\text{C}$, Rating of Per Diode
Maximum Instantaneous Forward Voltage	V_F	0.92V 0.87V(Typ.) 0.80V	$I_{FM}=12.5\text{A}$; $T_J=25^\circ\text{C}$ $I_{FM}=12.5\text{A}$; $T_J=125^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5μA 100μA	$T_J=25^\circ\text{C}$; $T_J=125^\circ\text{C}$;
Dielectric Strength	V_{dis}	2.5KV	Terminals to Case, AC 1 Minute
Typical Junction Capacitance	C_J	200pF	Measured at 1.0MHz $V_R=4.0\text{V}$
Maximum Reverse Recovery Time	t_{rr}	500ns	$I_F=0.5\text{A}$; $I_R=1.0\text{A}$; $I_{rr}=0.25\text{A}$

- Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.
2. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

**25 Amp
Low VF Bridge
Rectifier 600
Volts**

GBJ



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

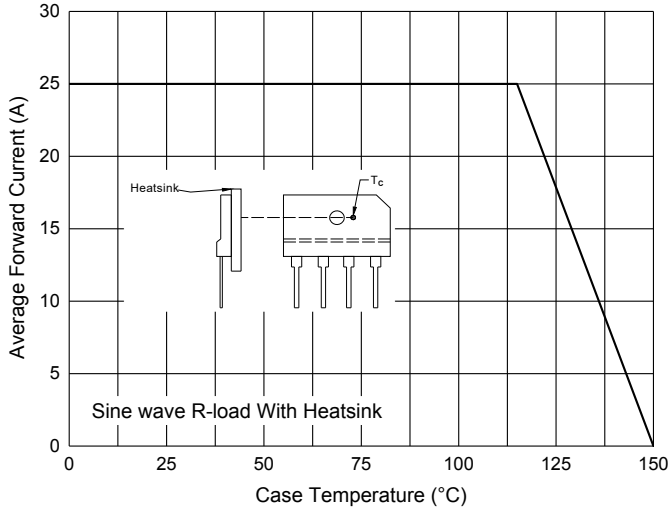


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

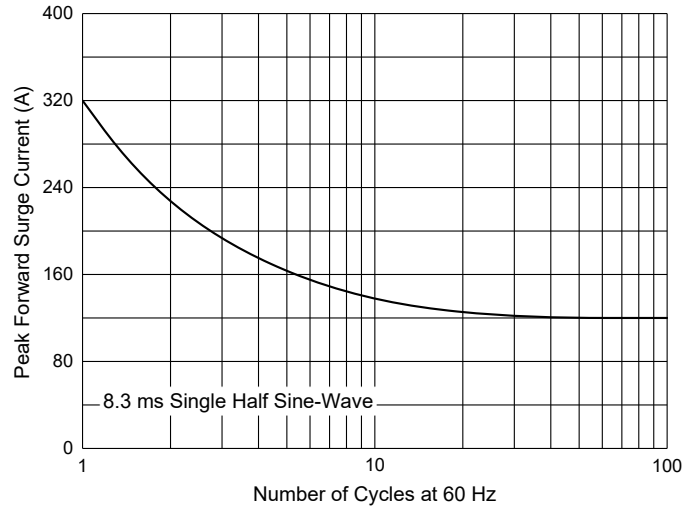


Fig. 3 - Forward Characteristics

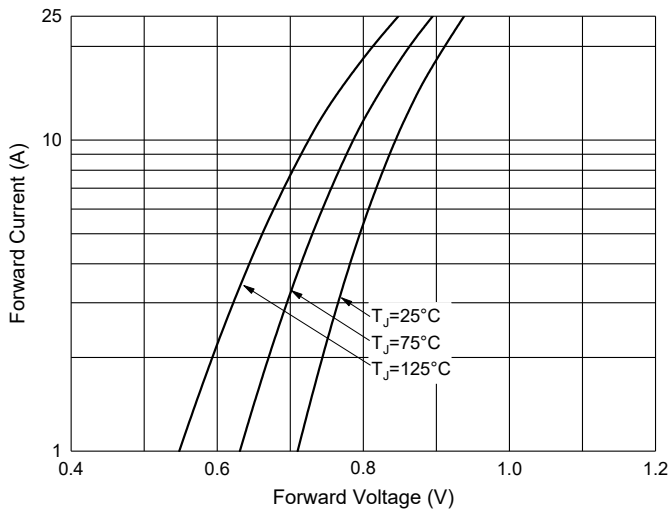
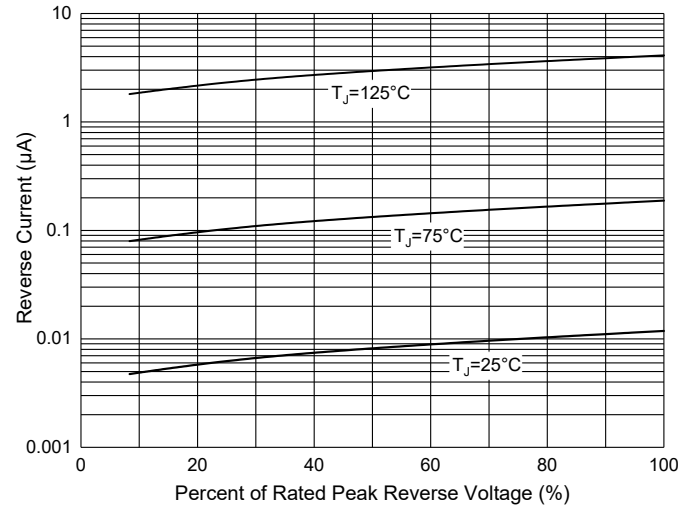


Fig. 4 - Reverse Characteristics



Ordering Information

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

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

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