

	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: 1.8°C/W Junction to Case (Note 2)
- Typical Thermal Resistance: 23°C/W Junction to Ambient (Note 2)

Mechanical Data

- Mounting Torque: 5in-lbs

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBU15L06	GBU15L06	600V	420V	600V

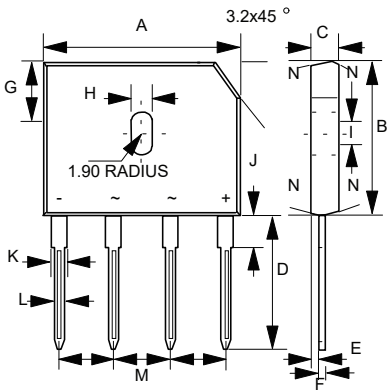
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	15A	$T_C=100^{\circ}\text{C}$,With Heatsink
Peak Forward Surge Current	I_{FSM}	250A 500A	8.3ms,Half Sine Wave 1.0ms,Square Wave
Current Squared Time	I^2t	259A 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 0.86V(Typ.) 0.80V	$I_{FM}=7.5\text{A}$; $T_J=25^{\circ}\text{C}$ $I_{FM}=7.5\text{A}$; $T_J=125^{\circ}\text{C}$
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	160pF	Measured at 1.0MHz VR=4.0V
Maximum Reverse Recovery Time	t_{rr}	500ns	IF=0.5A; IR=1.0A; Irr=0.25A

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.

15 Amp Low VF Bridge Rectifier 600 Volts

GBU



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.860	0.880	21.80	22.30	
B	0.720	0.740	18.30	18.80	
C	0.130	0.142	3.30	3.60	
D	0.690	0.717	17.50	18.20	
E	0.030	0.039	0.76	1.00	
F	0.018	0.024	0.46	0.60	
G	0.290	0.310	7.40	7.90	
H	0.140	0.160	3.50	4.10	
I	0.065	0.085	1.65	2.16	
J	0.060	0.096	1.52	2.45	
K	0.077	0.098	1.95	2.50	
L	0.040	0.050	1.02	1.27	
M	0.190	0.210	4.83	5.33	
N	7.0° TYPICAL				

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

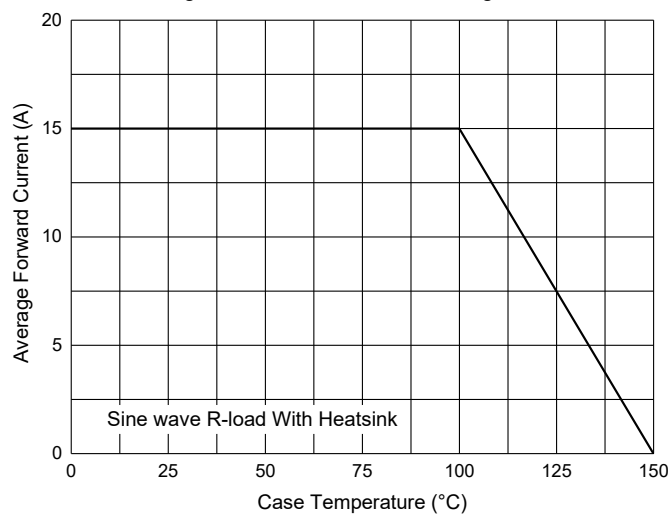


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

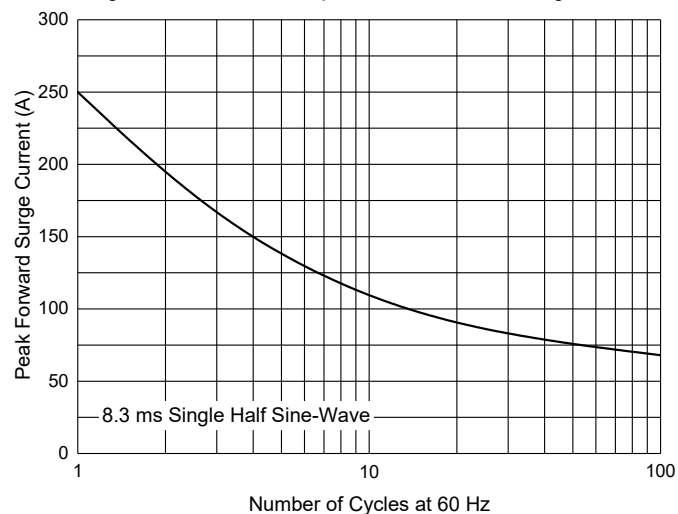


Fig. 3 - Forward Characteristics

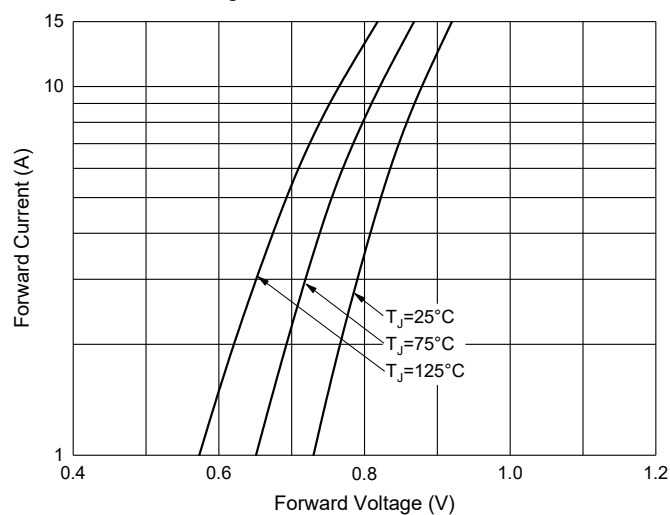
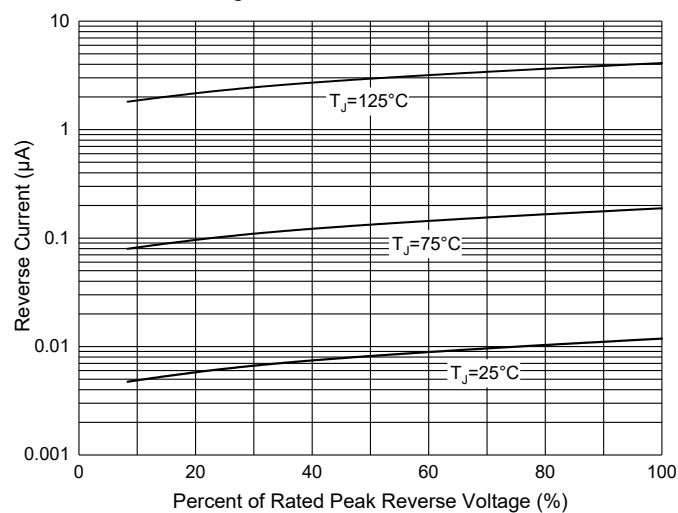


Fig. 4 - Reverse Characteristics



Ordering Information

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

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

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