

**51** E502650

#### **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 Surge Overload Rating

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance 2.2°C/W Junction To Case (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
GBU6A	GBU6A	50V	35V	50V
GBU6B	GBU6B	100V	70V	100V
GBU6D	GBU6D	200V	140V	200V
GBU6G	GBU6G	400V	280V	400V
GBU6J	GBU6J	600V	420V	600V
GBU6K	GBU6K	800V	560V	800V
GBU6M	GBU6M	1000V	700V	1000V

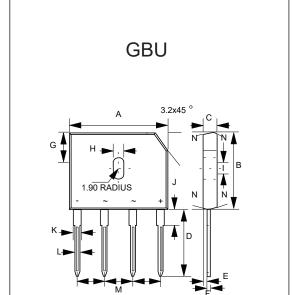
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current <sup>(NOTE 2)</sup>	I <sub>F(AV)</sub>	6.0A	T <sub>C</sub> = 100°C	
Peak Forward Surge Current	I <sub>FSM</sub>	175A 160A 350A 320A	$T_J$ = 25°C 8.3ms, $T_J$ = 125°C Half Sine $T_J$ = 25°C 1.0ms, $T_J$ = 125°C Half Sine	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V	I <sub>FM</sub> = 3.0A; T <sub>J</sub> = 25°C	
Rating for Fusing	I <sup>2</sup> t	127A <sup>2</sup> s 61.3A <sup>2</sup> s	t<8.3ms t<1.0ms	
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	
Typical Junction Capacitance	CJ	50pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V	

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.

# 6 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts



	DIMENSIONS					
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOIL	
Α	0.860	0.880	21.80	22.30		
В	0.720	0.740	18.30	18.80		
С	0.130	0.142	3.30	3.60		
D	0.690	0.717	17.50	18.20		
Е	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		
Н	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		
М	0.190	0.210	4.83	5.33		
N	7.0° TYPICAL					



### **Curve Characteristics**

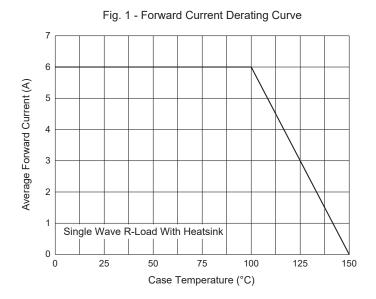


Fig. 3 - Typical Instantaneous Forward Characteristics

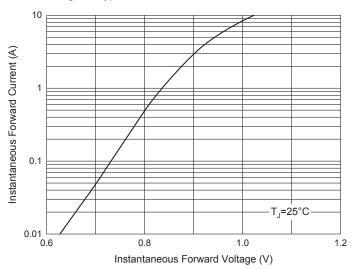


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

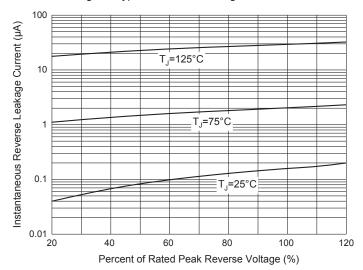
Current

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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