

**F1** 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 Current Capability
- · Glass Passivated Chip Junction

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 1.5°C/W Junction to Case(Note2)

## **Mechanical Data**

• Mounting Torque: 5in-lbs

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJ2010S	GBJ2010S	1000V	700V	1000V

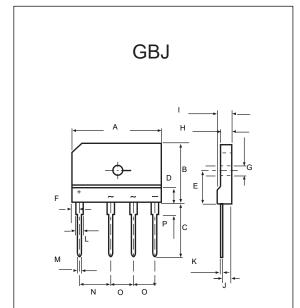
# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	20A 4A	T <sub>C</sub> = 100°C,With Heatsink T <sub>A</sub> = 25°C,Without Heatsin	
Peak Forward Surge Current	I <sub>FSM</sub>	280A	8.3ms, Half Sine	
Maximum Forward Voltage Drop Per Element	V <sub>F</sub>	1.0V	I <sub>FM</sub> = 10A Per Diode; T <sub>J</sub> = 25°C	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 100uA	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C	
Dielecric Strength	V <sub>ISO</sub>	2.5KV	Terminals to Case, AC 1 Minute	
Rating for Fusing	I <sup>2</sup> t	325 A <sup>2</sup> s	t<8.3ms	
Typical Junction Capacitance	Сл	85 pF	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.

# 20 Amp Glass Passivated Bridge Rectifier 1000 Volts



DIMENSIONS						
DIM	INCHES		MM		NOTE	
Dilvi	MIN	MAX	MIN	MAX	NOTE	
Α	1.170	1.190	29.70	30.30		
В	0.780	0.800	19.70	20.30		
С	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		
Н	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		
0	0.290	0.300	7.30	7.70		
Р	0.150	0.170	3.80	4.20		



## **Curve Characteristics**

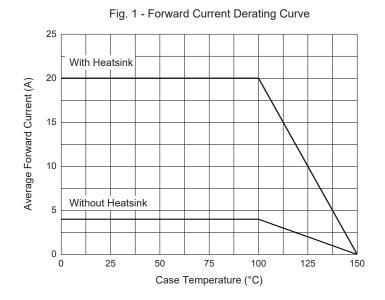


Fig. 3 - Typical Instantaneous Forward Characteristics

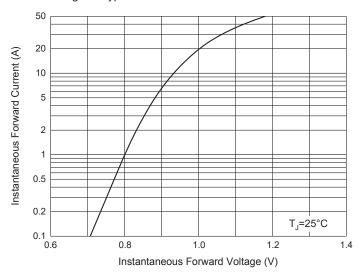


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

Current

350

300

250

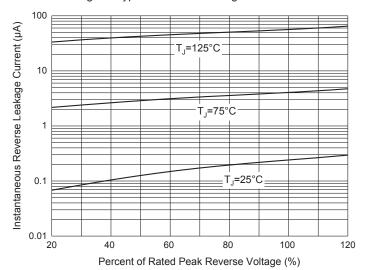
250

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:15pcs/Tube,750pcs/Box,1500pcs/Carton	

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

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