

# GBJ/KBJ50005 thru GBJ/KBJ5010

<p><b>GLASS PASSIVATED BRIDGE RECTIFIERS</b></p>	<p>REVERSE VOLTAGE - 50 to 1000Volts FORWARD CURRENT - 50 Amperes</p>
<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>● Rating to 1000V PRV</li> <li>● Ideal for printed circuit board</li> <li>● Low forward voltage drop, high current capability</li> <li>● Reliable low cost construction utilizing molded plastic technique results in inexpensive product</li> <li>● The plastic material has UL flammability classification 94V-0</li> </ul>	<p><b>GBJ</b></p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBJ/KBJ 50005	GBJ/KBJ 5001	GBJ/KBJ 5002	GBJ/KBJ 5004	GBJ/KBJ 5006	GBJ/KBJ 5008	GBJ/KBJ 5010	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	30	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @ T <sub>c</sub> =100°C (w without heatsink)	I <sub>(AV)</sub>	50.0								A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	400								A
Maximum Forward Voltage at 25A DC	V <sub>F</sub>	1.1								V
Maximum DC Reverse Current @ T <sub>J</sub> =25°C at Rated DC Blocking Voltage @ T <sub>J</sub> =125°C	I <sub>R</sub>	10								uA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	510								A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	C <sub>J</sub>	85								pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	0.6								°C/W
Operating Temperature Range	T <sub>J</sub>	-55to+150								°C
Storage Temperature Range	T <sub>STG</sub>	-55to+150								°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Device mounted on 300mm\*300mm\*1.6mm cu plate heatsink.

