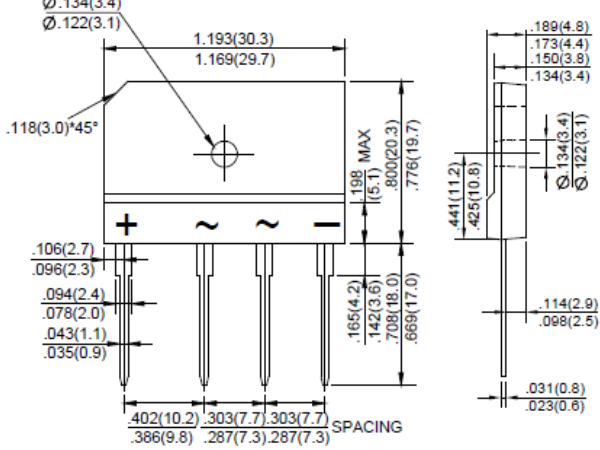


GLASS PASSIVATED BRIDGE RECTIFIERS	REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10 Amperes
<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Rating to 1000V PRV</li> <li>• Ideal for printed circuit board</li> <li>• Low forward voltage drop,high current capability</li> <li>• Reliable 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>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• Polarity: As marked on Body</li> <li>• Mounting position: Any</li> </ul>	<p style="text-align: center;">GBJ</p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings 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 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	Unit	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
RMS Reverse Voltage	V <sub>RMS</sub>	35	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 @TC=110°C(without heatsink)	I <sub(av)< sub=""></sub(av)<>	10								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	3.5								A
Maximum Forward Voltage at 5A DC	V <sub>F</sub>	220								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>	1.0								µA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	5								A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	C <sub>J</sub>	200.86								pF
Typical Thermal Resistance (Note2)	R <sub>θJA</sub>	9								°C/W
	R <sub>θJC</sub>	1.4								
	R <sub>θJL</sub>	1.5								
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150								°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Device mounted on 150mm\*150mm\*1.6mm cu plate heatsink.

## Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

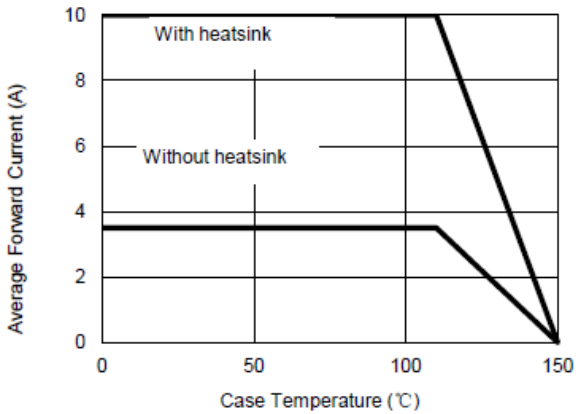


Fig. 3 - Typical Reverse Characteristics

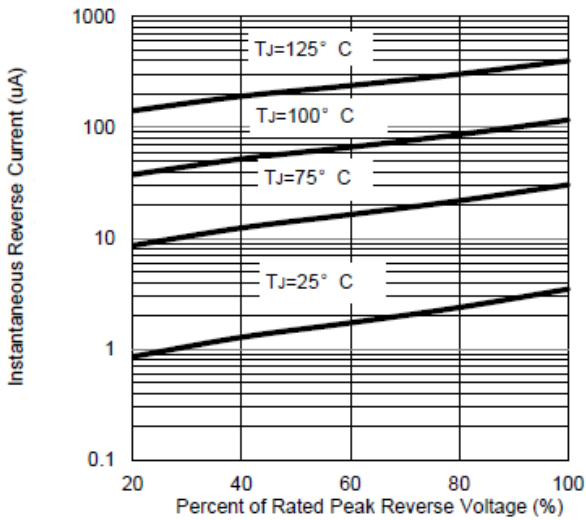


Fig. 5 - Typical Junction Capacitance

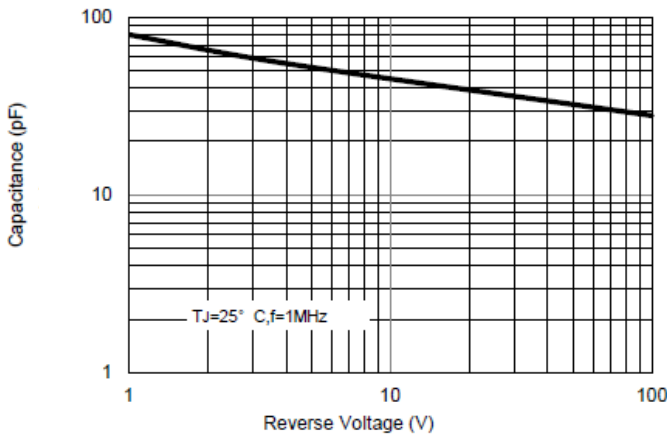


Fig. 2 - Maximum Non-Repetitive Surge Current

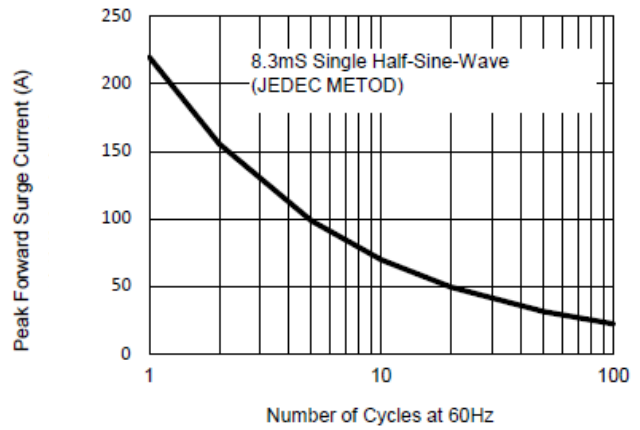


Fig. 4 - Typical Forward Characteristics

