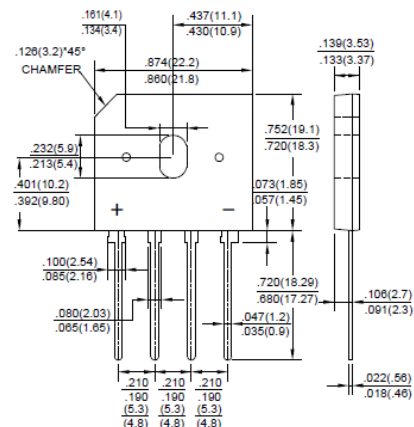


GLASS PASSIVATED BRIDGE RECTIFIERS	REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10 Amperes									
<p>FEATURES</p> <ul style="list-style-type: none"> • Ideal for printed circuit board • Low forward voltage drop,high current capability • High surge current capability • Glass passivated chip <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Polarity: As marked on Body • Mounting position: Any 	<p style="text-align: center;">GBU</p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>									
<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%</p>										
<p style="text-align: center;">Characteristics</p>	<p style="text-align: center;">Symbol</p>	<p style="text-align: center;">GBU 10005</p>	<p style="text-align: center;">GBU 1001</p>	<p style="text-align: center;">GBU 1002</p>	<p style="text-align: center;">GBU 1004</p>	<p style="text-align: center;">GBU 1006</p>	<p style="text-align: center;">GBU 1008</p>	<p style="text-align: center;">GBU 1010</p>	<p style="text-align: center;">Unit</p>	
<p>Maximum Repetitive Peak Reverse Voltage</p>	<p>V_{RRM}</p>	<p>50</p>	<p>100</p>	<p>200</p>	<p>400</p>	<p>600</p>	<p>800</p>	<p>1000</p>	<p>V</p>	
<p>RMS Reverse Voltage</p>	<p>V_{RMS}</p>	<p>35</p>	<p>70</p>	<p>140</p>	<p>280</p>	<p>420</p>	<p>560</p>	<p>700</p>	<p>V</p>	
<p>Maximum DC Blocking Voltage</p>	<p>V_{DC}</p>	<p>50</p>	<p>100</p>	<p>200</p>	<p>400</p>	<p>600</p>	<p>800</p>	<p>1000</p>	<p>V</p>	
<p>Maximum Average Forward Rectified Current @$T_C=100^\circ\text{C}$(without heatsink)</p>	<p>$I_{(AV)}$</p>	<p style="text-align: center;">10 3</p>							<p>A</p>	
<p>Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)</p>	<p>I_{FSM}</p>	<p style="text-align: center;">240</p>							<p>A</p>	
<p>Maximum Forward Voltage at 5A DC</p>	<p>V_F</p>	<p style="text-align: center;">1.0</p>							<p>V</p>	
<p>Maximum DC Reverse Current @$T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage @$T_J=125^\circ\text{C}$</p>	<p>I_R</p>	<p style="text-align: center;">5 500</p>							<p>μA</p>	
<p>I^2t Rating for Fusing ($t<8.3\text{ms}$)</p>	<p>I^2t</p>	<p style="text-align: center;">200.9</p>							<p>A^2s</p>	
<p>Typical Junction Capacitance Per Element (Note1)</p>	<p>C_J</p>	<p style="text-align: center;">70</p>							<p>pF</p>	
<p>Typical Thermal Resistance (Note2)</p>	<p>$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$</p>	<p style="text-align: center;">9 2 1.5</p>							<p>$^\circ\text{C/W}$</p>	
<p>Junction and Storage Temperature Range</p>	<p>T_J, T_{STG}</p>	<p style="text-align: center;">-55 to +150</p>							<p>$^\circ\text{C}$</p>	
<p>NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC. 2. Device mounted on 100mm*100mm*1.6mm cu plate heatsink.</p>										

Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

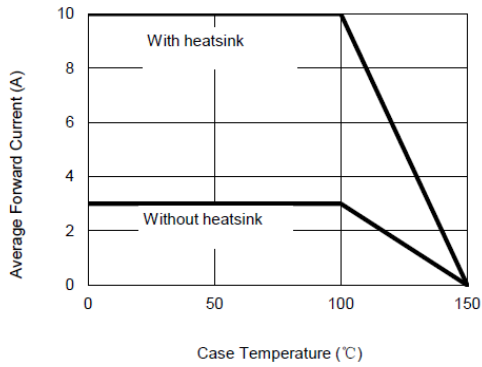


Fig. 2 - Maximum Non-Repetitive Surge Current

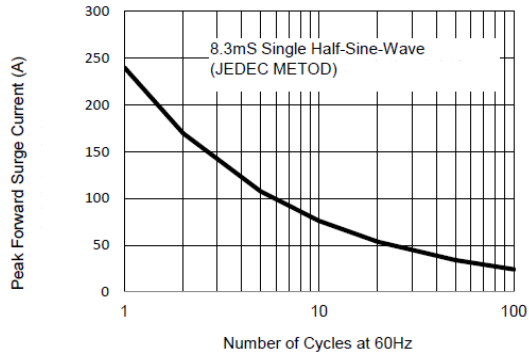


Fig. 3 - Typical Reverse Characteristics

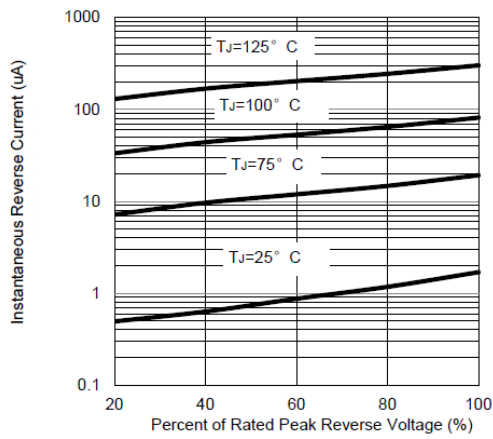


Fig. 4 - Typical Forward Characteristics

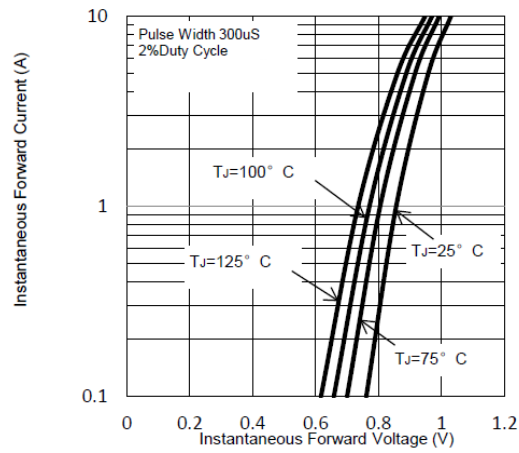


Fig. 5 - Typical Junction Capacitance

