



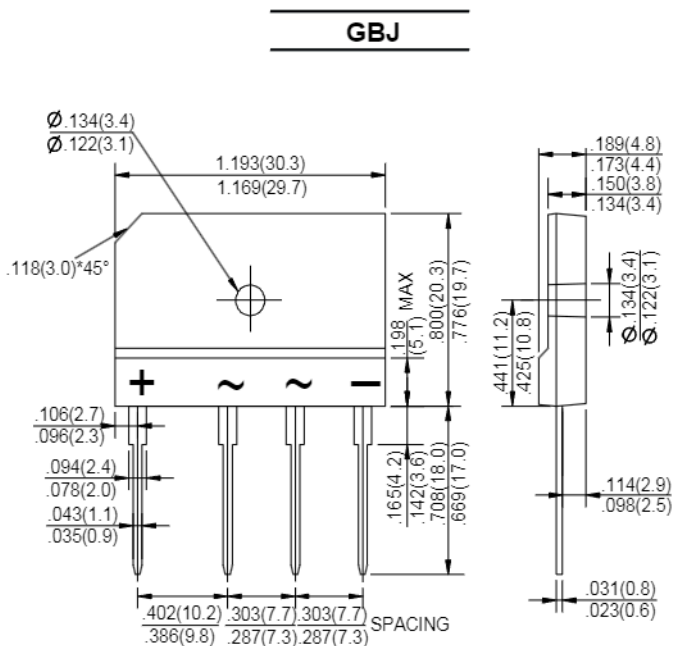
# GBJ35005 THRU GBJ3510 BRIDGE RECTIFIERS

## Features

- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Surge Overload Rating to 350A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- UL Listed Under Recognized Component Index, File Number # E469616

## Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Weight: 6.6 grams (approx)
- Marking: Type Number



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	GBJ 35005	GBJ 3501	GBJ 3502	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Forward Rectified Output Current (Note 1) @ $T_C = 100^\circ\text{C}$	$I_o$	35.0							A
Non-Repetitive Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400							A
Forward Voltage (per element) @ $I_F = 12.5\text{A}$	$V_{FM}$	1.1							V
Peak Reverse Current at Rated DC Blocking Voltage @ $T_C = 25^\circ\text{C}$ @ $T_C = 125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 1)	$I^2t$	510							$\text{A}^2\text{s}$
Typical Junction Capacitance (per element) (Note 2)	$C_j$	85							pF
Typical Thermal Resistance Junction to Case (Note 3)	$R_{\theta JC}$	0.6							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to + 150							$^\circ\text{C}$

- Notes: 1. Non-repetitive, for  $t > 1\text{ms}$  and  $< 8.3\text{ms}$ .  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.  
3. Thermal resistance from junction to case per element. Unit mounted on 220 x 220 x 1.6mm aluminum plate heat sink.

## Rating and Characteristic Curves ( $T_A = 25^\circ\text{C}$ Unless otherwise noted )

