

# GBJ25005 THRU GBJ2510

## GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 25.0A

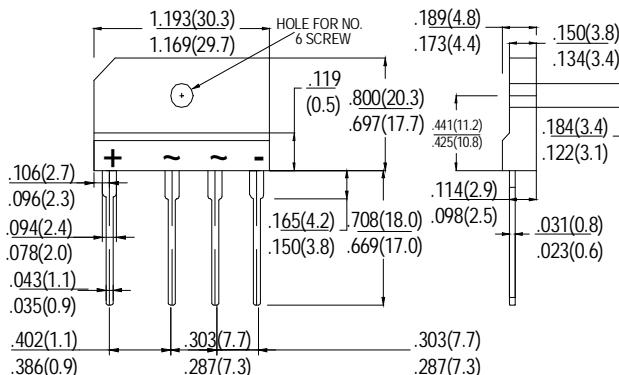
### FEATURES

- Low leakage
- Low forward voltage
- Surge overload ratings-350 Amperes

### MECHANICAL DATA

- **Case:** Molded plastic
- **Epoxy:** UL 94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** Symbols molded or marked on body
- **Mounting:** Thru hole for 6# screw
- **Weight:** 6.6 grams

### GBJ



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRONICAL 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%.

	SYMBOL	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	<b>V</b>
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	<b>V</b>
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	<b>V</b>
Maximum Average Forward rectified Output Current at $T_c=100^\circ\text{C}$	$I_o$						25		<b>A</b>
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$						350		<b>A</b>
Maximum Forward Voltage Drop per element at 12.5 A DC	$V_F$				1.05				<b>V</b>
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ $T_A=25^\circ\text{C}$	$I_R$	10						$\mu\text{A}$
			500						
$I^2t$ Rating for Fusing ( $t<8.3\text{ms}$ )	$I^2t$				510				$\text{A}^2\text{s}_{ec}$
Typical Junction Capacitance per Element(Note 1)	$C_J$				85				<b>pF</b>
Typical Thermal Resistance, Junction to Case (Note 2)	$R_{\theta JA}$				2.7				$^\circ\text{C}/\text{W}$

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to case per element. Unit mounted on 150 x 150 x 1.6mm copper plate heat sink.