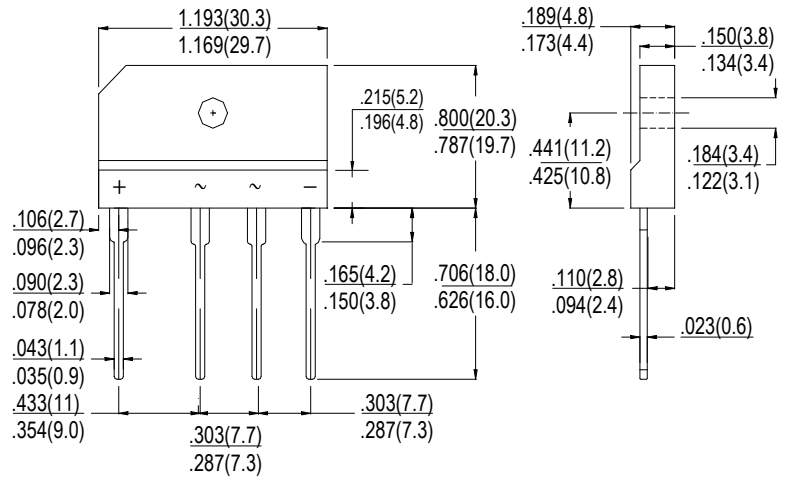


### Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

### GBJ



dimensions in inches and (millimeters)

### Mechanical Data

- Case: Molded plastic, GBJ
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version

### 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%.

TYPE NUMBER	SYMBOL	GBJ 50005	GBJ 5001	GBJ 5002	GBJ 5004	GBJ 5006	GBJ 5008	GBJ 5010	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (with heatsink) (Note 1) @ $T_c = 100^\circ C$ (without heatsink)	$I_o$	50.0 3.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	450							A
Forward Voltage per element @ $I_F = 25A$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 125^\circ C$	$I_R$	5.0 500							$\mu A$
Typical Junction Capacitance per leg	$C_J$	75							pF
Between junction and ambient, Without heatsink	$R_{\theta JA}$	22							$^\circ C/W$
Between junction and case, With heatsink	$R_{\theta JC}$	0.8							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150							$^\circ C$

NOTES: 1. Device mounted on 300mm\*300mm\*1.6mm cu plate heatsink.

