



GBU		
Dim	Min	Max
A	21.8	22.3
B	3.5	4.1
C	7.4	7.9
D	1.65	2.16
E	2.25	2.75
G	1.02	1.27
H	4.83	5.33
J	17.5	18.0
K	3.2 X 45°	
L	18.3	18.8
M	3.30	3.56
N	0.46	0.56
P	0.76	1.0

All Dimensions in mm

## Features

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

## Mechanical Data

- Case: GBU ,molded plastic
- 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	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>R</sub> RM	50	100	200	400	600	800	1000	V
	V <sub>R</sub> WM								
	V <sub>DC</sub>								
RMS Reverse Voltage	V <sub>R</sub> M	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T <sub>c</sub> =90°C	I <sub>F(AV)</sub>								A
							15.0		
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>								A
							200		
Forward Voltage per element @IF=7.5A @IF=15A	V <sub>FM</sub>								V
Peak Reverse Current @T <sub>A</sub> =25 °C At Rated DC Blocking Voltage @T <sub>A</sub> =125 °C	I <sub>R</sub>				5.0				uA
					500				
I <sup>2</sup> t Rating for fusing (t <8.3ms)	I <sup>2</sup> t				166				A <sup>2</sup> s
Typical Junction Capacitance per leg (Note 2)	C <sub>J</sub>				70				pF
Typical Thermal Resistance per leg (Note 3)	R <sub>θJA</sub>				30.9				°C/W
	R <sub>θJL</sub>				7.3				
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>				-55to+150				°C

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

3. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

