

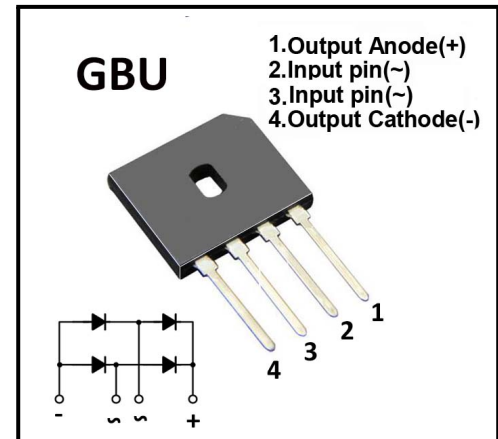
# GBU10005-GBU1010/G

Single Phase 10.0Amp Glass passivated Bridge Rectifiers

## Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals
- The G suffix is uses for photoresist chip, otherwise it is a knife scraping chip

## Mechanical Data



## MECHANICAL DATA

- Case: Molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbol marking on body
- Mounting Position: Any

## Maximum Ratings And Electrical Characteristics (@T<sub>A</sub>=25°C unless otherwise noted)

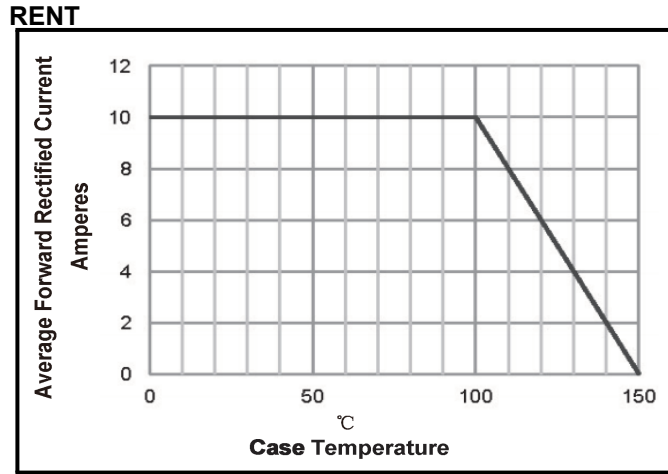
Symbol	Parameter	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	Unit
V <sub>RRM</sub>	repetitive peak reverse voltage	50	100	200	400	600	800	1000	V
V <sub>RMS</sub>	RMS voltage	35	70	140	280	420	560	700	V
V <sub>DC</sub>	DC blocking voltage	50	100	200	400	600	800	1000	V
I <sub>AV</sub>	Maximum average forward rectified current with heatsink	10.0							A
I <sub>FSM</sub>	Peak forward surge current, 8.3ms single half sine-wave	200.0							A
I <sub>t</sub> <sup>2</sup>	I <sub>t</sub> <sup>2</sup> Rating for fusing (t=8.3ms, T <sub>A</sub> =25°C )	166							A <sub>S</sub> <sup>2</sup>
V <sub>F</sub>	Forward Voltage at 10.0A	1.10							V
I <sub>R</sub>	Peak Reverse Current@T <sub>A</sub> =25°C at rated DC blocking voltage@ T <sub>A</sub> =125°C	5.0							uA
C <sub>J</sub>	Typical junction capacitance(Note 1)	45							pF
R <sub>qJA</sub>	Typical thermal resistance	55.0							°C/W
T <sub>J</sub>	Operation Temperature Range	-55 to +150							°C
T <sub>STG</sub>	Storage Temperature Range	-55 to +150							

Note:(1)Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 (2)Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.  
 (3) Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

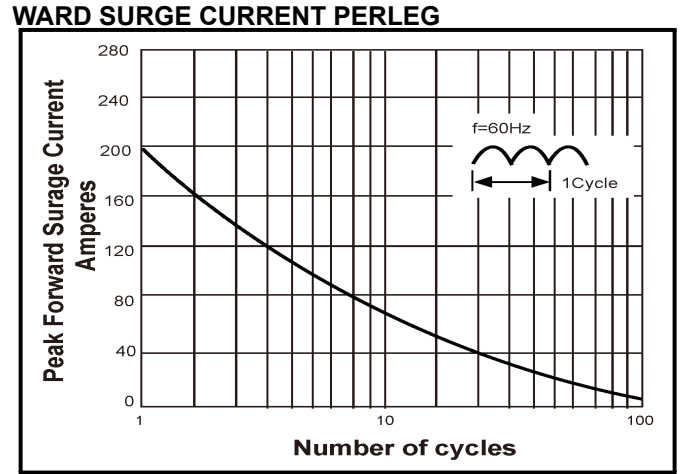


**Ratings And Characteristic Curves**

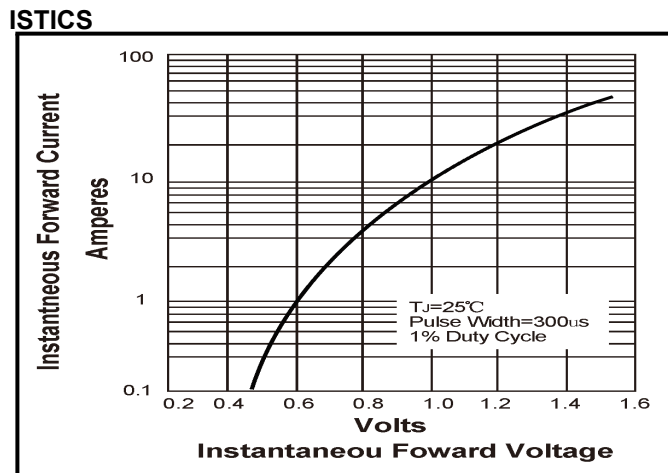
**Figure 1: DERATING CURVE OUTPUT RECTIFIED CURRENT**



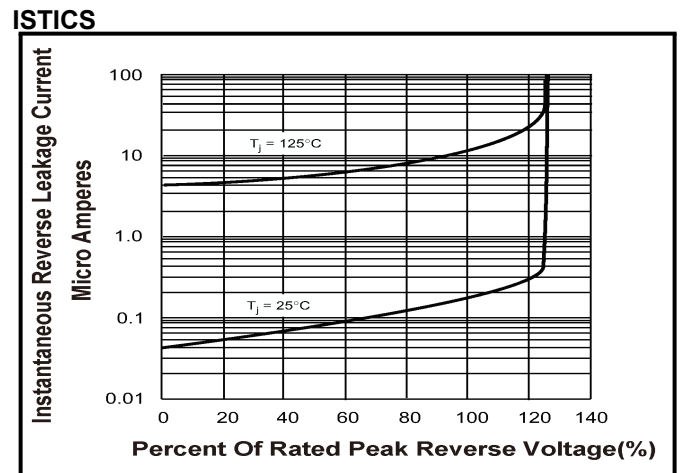
**Figure 2: MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



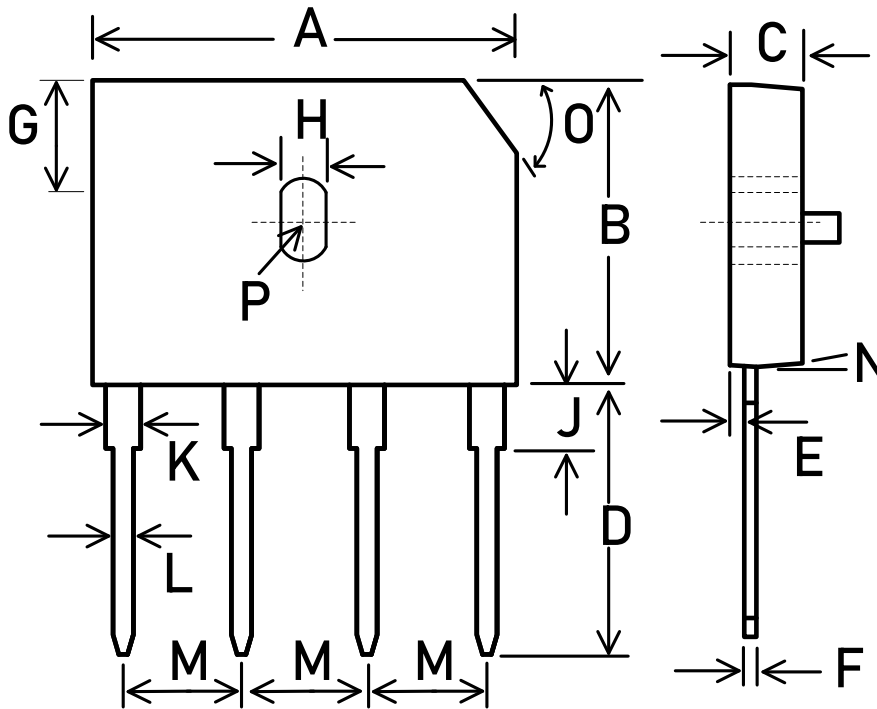
**Figure 3: TYPICAL FORWARD VOLTAGE CHARACTERISTICS**



**Figure 4: TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



Outline Drawing -GBU



SYMBOL	MILLIMETER	
	MIN.	MAX.
A	21.80	22.30
B	18.30	18.80
C	3.30	3.60
D	17.50	18.00
E	0.76	1.00
F	0.45	0.55
G	7.40	7.90
H	3.50	4.10
I	1.65	2.16
J	2.25	2.75
K	2.00	2.40
L	1.00	1.30
M	4.83	5.33
N	7.0° TYP.	
O	(3.2)x45°	
P	1.90PADIUS	

