

## GBL2005-HF Thru. GBL210-HF

Reverse Voltage: 50 to 1000V

Forward Current: 2A

RoHS Device

Halogen Free

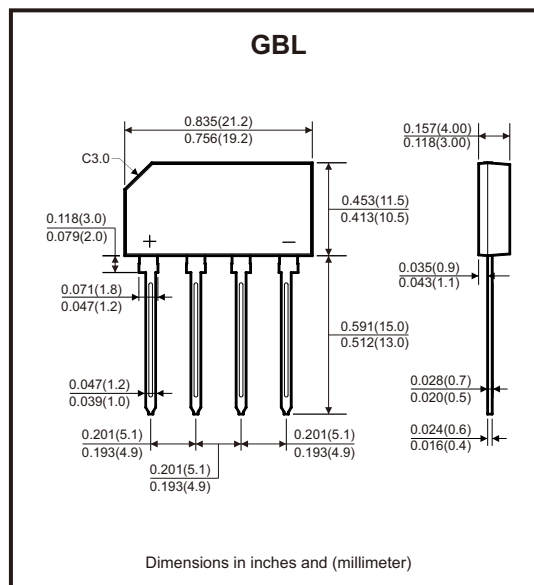


### Features

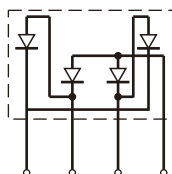
- High efficiency.
- Idea for automated placement.
- High surge current capability.

### Mechanical Data

- Case: GBL, molded plastic.
- Molding compound meets UL 94V-0 flammability rating.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.
- Polarity: As marked on body.



### Circuit Diagram



### 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%

Parameter	Symbol	GBL2005 -HF	GBL201 -HF	GBL202 -HF	GBL204 -HF	GBL206 -HF	GBL208 -HF	GBL210 -HF	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Average forward current @Half-sine wave, resistance load, T <sub>C</sub> (Fig.1)	I <sub>O</sub>	2							A
Forward surge current (Non-repetitive) @60Hz sine wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	80							A
Current squared time @ 1ms ≤ t <sub>8.3</sub> ≤ ms T <sub>a</sub> =25°C, rating of per diode	I <sup>2</sup> <sub>t</sub>	26.6							A <sup>2</sup> s
Peak forward voltage @ I <sub>F</sub> =1A	V <sub>FM</sub>	1.05							V
Peak reverse current V <sub>R</sub> =V <sub>DC</sub> @T <sub>a</sub> =25°C V <sub>R</sub> =V <sub>DC</sub> @T <sub>a</sub> =100°C	I <sub>RRM</sub>	10 300							μA
Typical thermal resistance @Between junction and ambient	R <sub>θJA</sub>	47							°C/W
Junction temperature range	T <sub>J</sub>	-55 to +150							°C
Storage temperature range	T <sub>STG</sub>	-55 to +150							°C

## Typical Rating and Characteristics Curves (GBL2005-HF Thru. GBL210-HF)

Fig.1 -  $I_o$  —  $T_a$  Curve

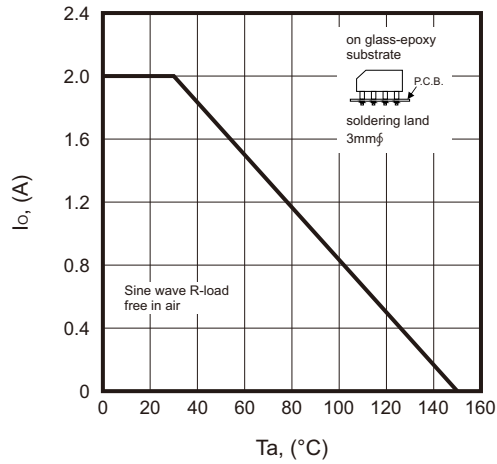


Fig.2 - Forward Surge Current Capability

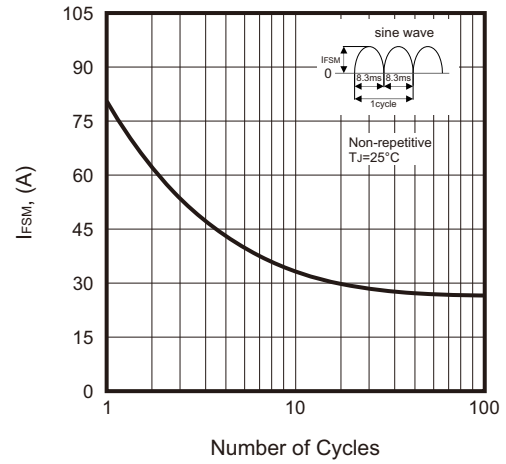


Fig.3 - Forward Voltage

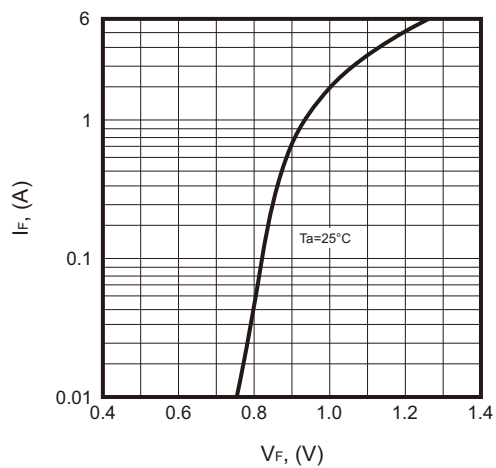
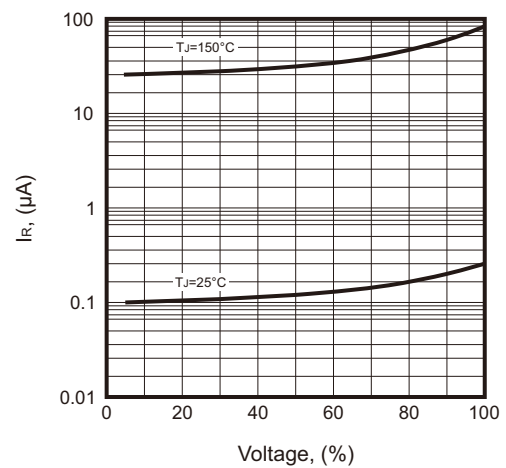
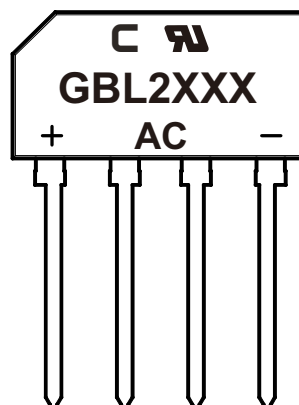


Fig.4 - Typical Reverse Characteristics



## Marking Code

Part Number	Marking code
GBL2005-HF	GBL2005
GBL201-HF	GBL201
GBL202-HF	GBL202
GBL204-HF	GBL204
GBL206-HF	GBL206
GBL208-HF	GBL208
GBL210-HF	GBL210



XX / XXX = Product type marking code  
 C = Comchip Logo

## Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	Carton (pcs)
GBL	20	6,000