GBL202 THRU GBL208

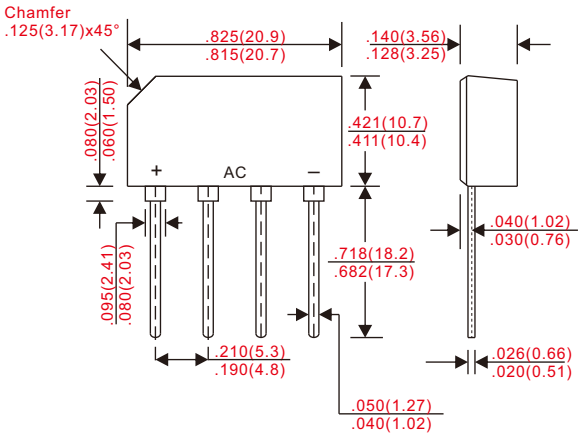
Chip Integration Technology Corporation **2A Glass Passivated Single-Phase Bridge Rectifiers**

■ Features

- Recommended for non-automatic applications.
- Ideal for & save space on printed circuit board.
- Applicable for automatic insertion.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- Suffix "G" indicates Halogen-free part, ex.GBL4005G.
- Lead-free parts meet RoHS requirments.

■ Outline

GBL



Dimensions in inches and (millimeters)

■ Mechanical data

- Epoxy:UL94V-0 rated flame retardant
- Case : Molded plastic, GBL
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : marked on body
- Weight : Approximated 2.0 gram

■ 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	Conditions	Symbol		UNIT
Maximum Average Forward Rectified Output Current @T_A =25°C		I_O	2	A
Forward Surge Current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	80	A
Rating for fusing (t<8.3ms)		I^2t	27	A^2sec
Storage temperature Range		T_{STG}	-55 ~ +150	°C
Typical thermal resistance per leg		$R_{\theta JA}$	40	°C/W
		$R_{\theta JC}$	12	
Maxmum Reverse Current @T_A=25°C at Rated D.C Blocking Voltage @T_A=125°C		I_R	5 300	uA

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @2A, T_A = 25°C V_F (V)	Operating Junction temperature T_J (°C)
GBL202	GBL22	200	140	200	1.1	-55 ~ +150
GBL206	GBL26	600	420	600		
GBL208	GBL28	800	560	800		

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■ Rating and characteristic curves

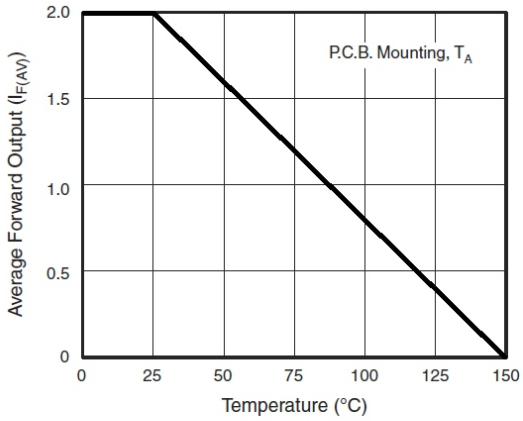

Fig. 1 - Derating Curve Output Rectified Current

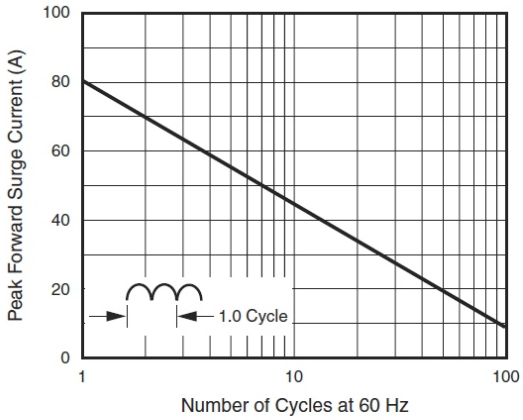

Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

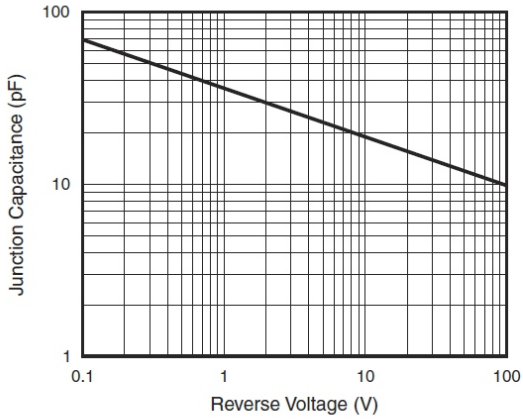

Fig. 5 - Typical Junction Capacitance Per Diode

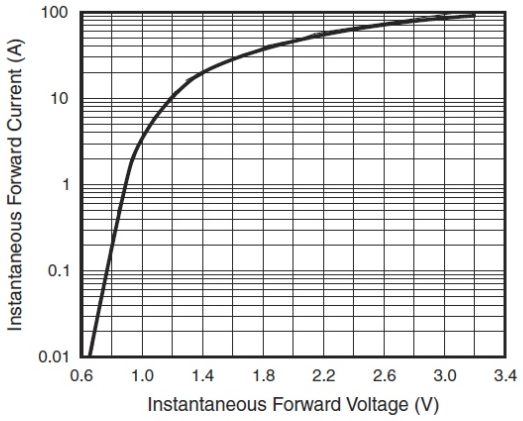

Fig. 3 - Typical Forward Characteristics Per Diode

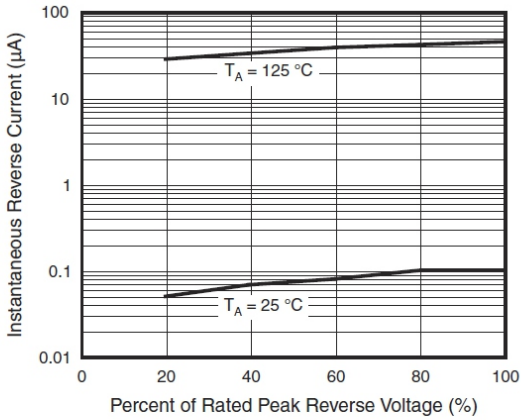

Fig. 4 - Typical Reverse Characteristics Per Diode

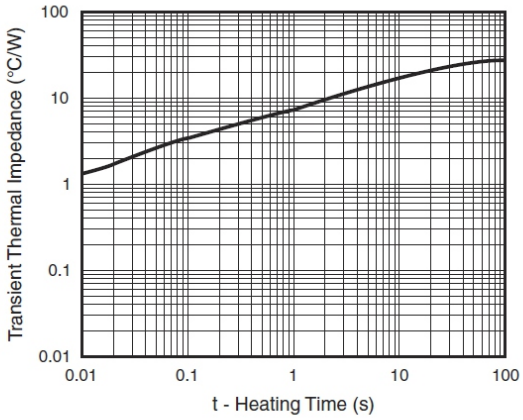

Fig. 6 - Typical Transient Thermal Impedance

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