GBL4005 THRU GBL410

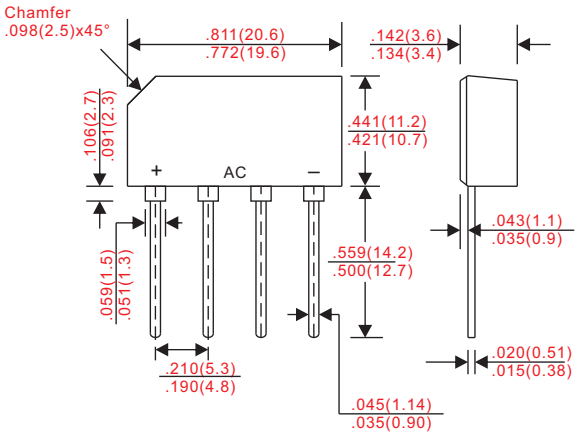
4A Miniature Glass Passivated Single-Phase Bridge Rectifiers

■ 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:UL94-V0 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	MIN.	TYP.	MAX.	UNIT
Forward rectified current	T_A = 50°C	I_O			4.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			125	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			10	uA
	V_R = V_{RRM} T_A = 100°C				1000	
Storage temperature		T_{STG}	-55		+150	°C

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 @4A, T_A = 25°C V_F (V)	Operating temperature T_J (°C)
GBL4005	GBL005	50	35	50	1.1	-55 ~ +150
GBL401	GBL01	100	70	100		
GBL402	GBL02	200	140	200		
GBL404	GBL04	400	280	400		
GBL406	GBL06	600	420	600		
GBL408	GBL08	800	560	800		
GBL410	GBL10	1000	700	1000		

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■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

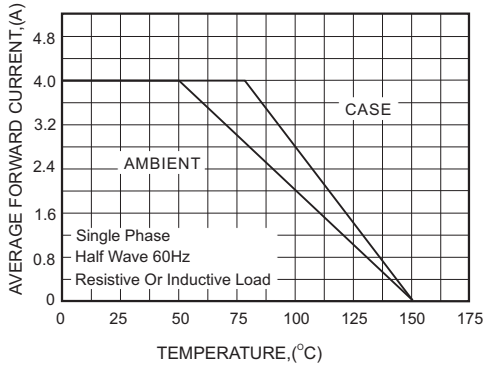


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

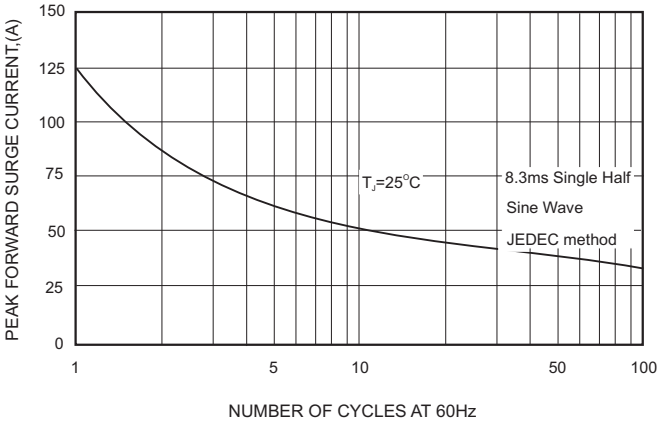


FIG.3-TYPICAL FORWARD CHARACTERISTICS

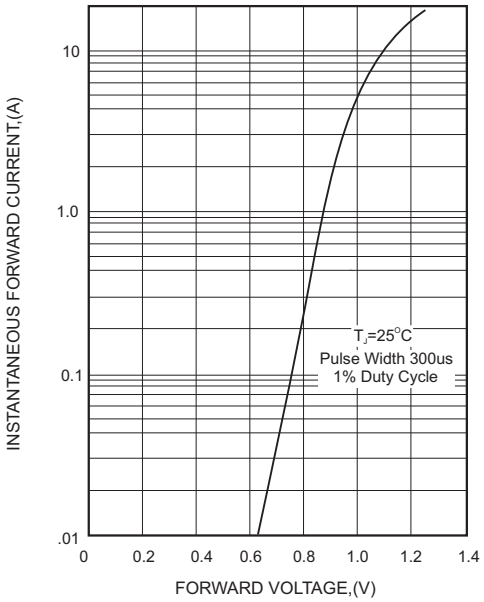
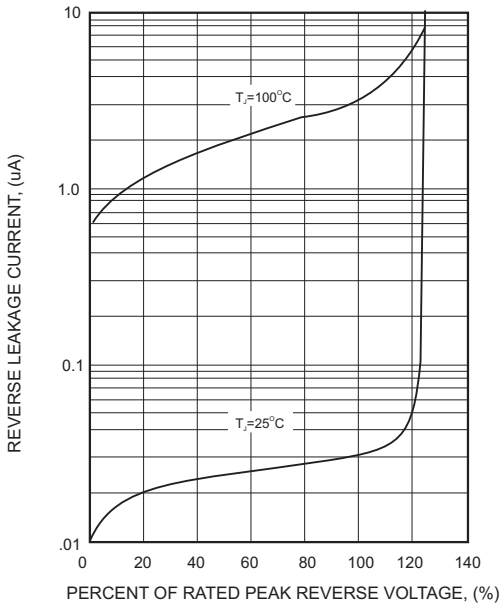


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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