

GBL810

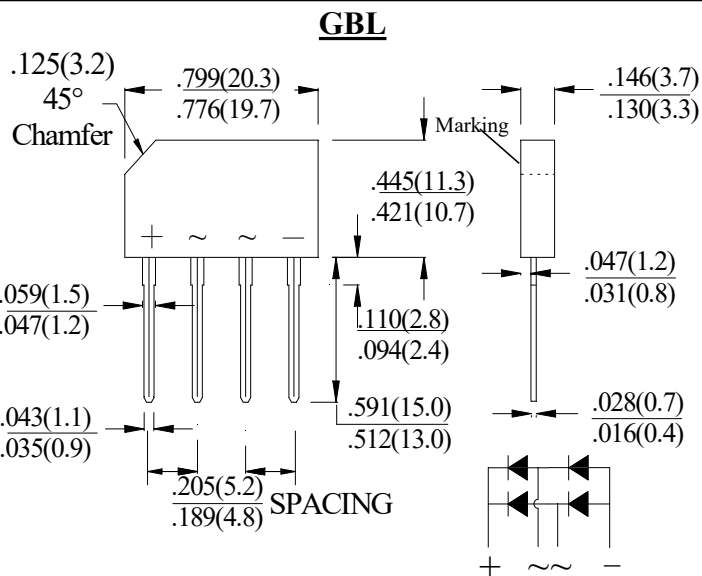
SINGLE PHASE 8.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

FEATURE

- . Glass passivated chip junctions
- . High case dielectric strength
- . Low Reverse Leakage Current
- . High surge current capability
- . Ideal for Printed Circuit Board Applications

MECHANICAL DATA

- . Case: GBL
- . Case Material: Molded Plastic.
UL Flammability Classification Rating 94V-0
- . Terminals: Pure tin plated, Lead free.
Leads solderable per MIL-STD-750, Method 2026.
- . Polarity: Marked on body
- . Weight: 2.1 grams
- . Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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	SYM BOL	GBL810	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	8.0	A
Peak Forward Surge Current @ $T_J=25^\circ\text{C}$	I_{FSM}	200	A
8.3ms single half sine-wave @ $T_J=125^\circ\text{C}$		160	
Peak Forward Surge Current @ $T_J=25^\circ\text{C}$	I_{FSM}	400	A
1.0ms single half sine-wave @ $T_J=125^\circ\text{C}$		320	
Maximum Forward Voltage @ 8.0A DC	V_F	1.1	V
Drop per element @ 4.0 A DC		1.0	
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$	I_R	5.0	μA
at rated DC blocking voltage @ $T_J=125^\circ\text{C}$		500.0	
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	166	A^2Sec
Typical Junction Capacitance (Note 1)	C_J	65	pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	35	$^\circ\text{C/W}$
	$R_{(JC)}$	4.2	
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to +150	$^\circ\text{C}$

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

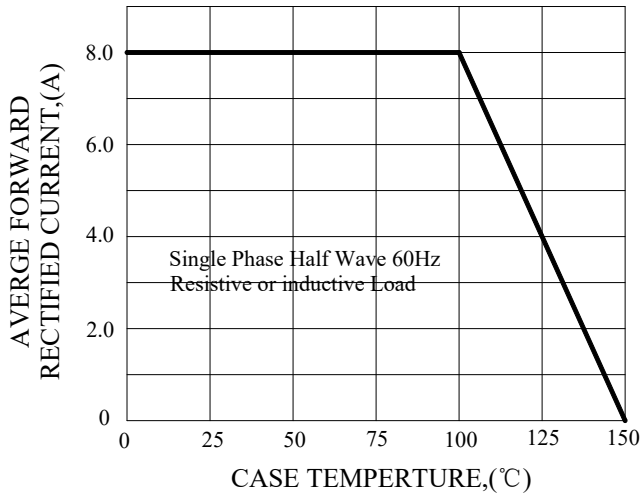


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

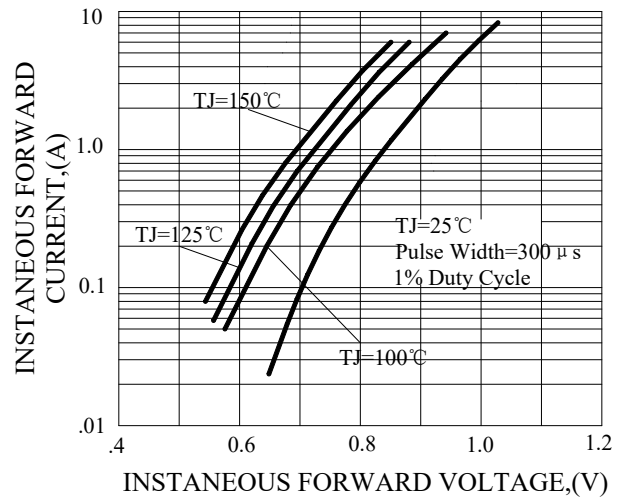


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

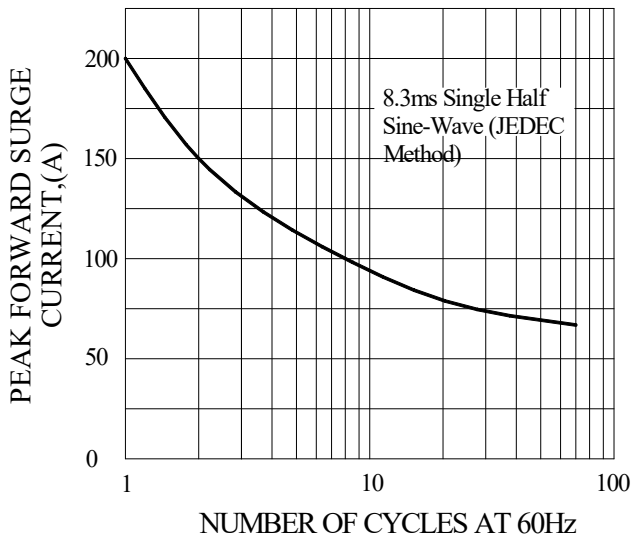


FIG.4-TYPICAL JUNCTION CAPACITANCE

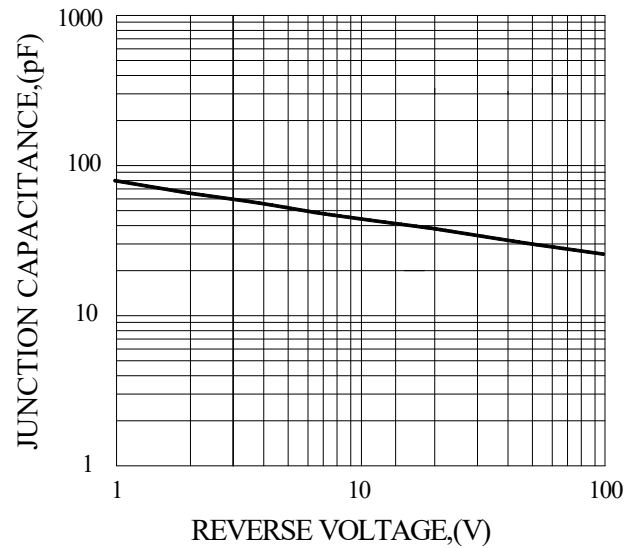
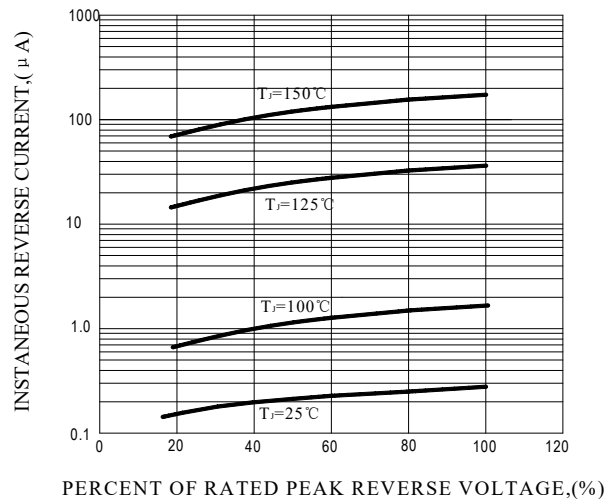
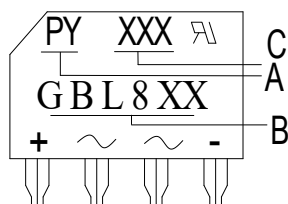


FIG.5-TYPICAL REVERSE CHARACTERISTICS



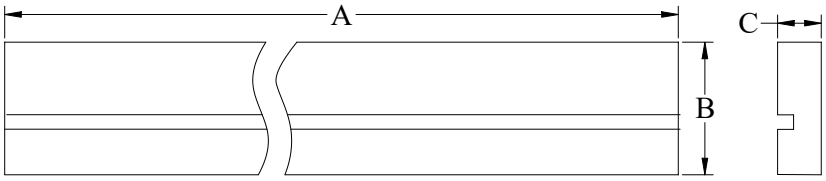
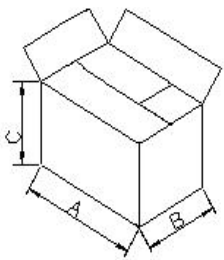
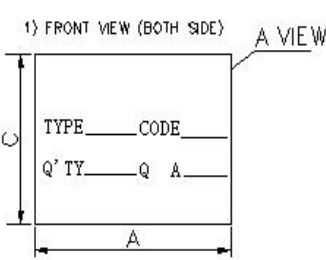
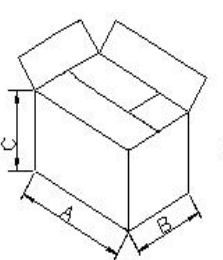
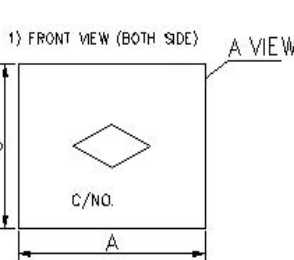
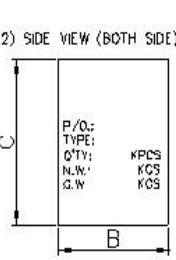
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Trademark
B	Product Name
C	Date code

2、Packaging

			
Tube			
	1) FRONT VIEW (BOTH SIDE) A VIEW 		1) FRONT VIEW (BOTH SIDE) A VIEW  2) SIDE VIEW (BOTH SIDE) 
Inside Box		Carton	

OUTLINE	A (mm)	B (mm)	C (mm)
Tube	512.5±1	28.8±1	6.1±1
Inner box	528±3	138±3	128±3
Carton	548±5	290±5	148±5
COUNT	TUBE (PCS)	BOX (PCS)	CARTON (PCS)
GBL	25	2000	4000