

GBP610

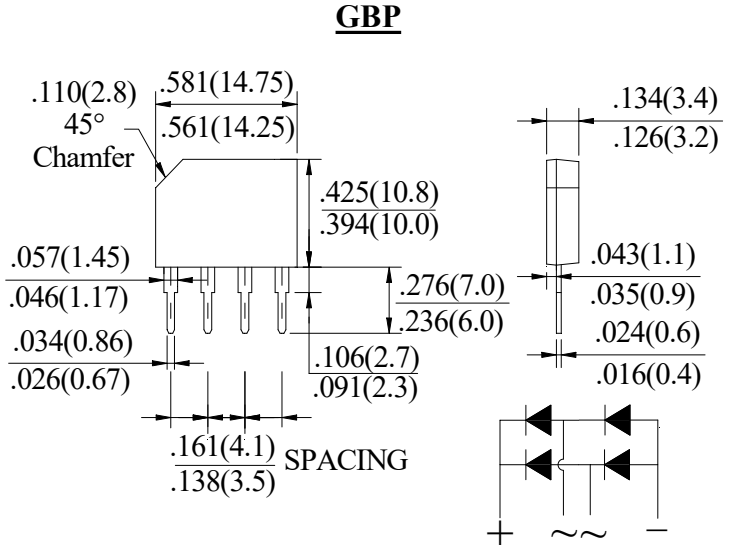
SINGLE PHASE 6.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

FEATURE

- . UL Listed Under Recognized Component Index, File Number E338195
- . 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: GBP
- . 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
- . 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	GBP610	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 (with heatsink Note2) Rectified Current @ $T_C=100^{\circ}C$ (without heatsink)	$I_{F(AV)}$	6.0 2.4	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	140	A
Maximum Forward Voltage @ 6.0A DC Drop per element @ 3.0A DC	V_F	1.1 1.0	V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at rated DC blocking voltage @ $T_J=125^{\circ}C$	I_R	5.0 500.0	μA
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	81.3	A^2Sec
Typical Junction Capacitance (Note 1)	C_J	45	pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	3.0	$^{\circ}C/W$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$
Operating Junction Temperature	T_J	-55 to +150	$^{\circ}C$

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

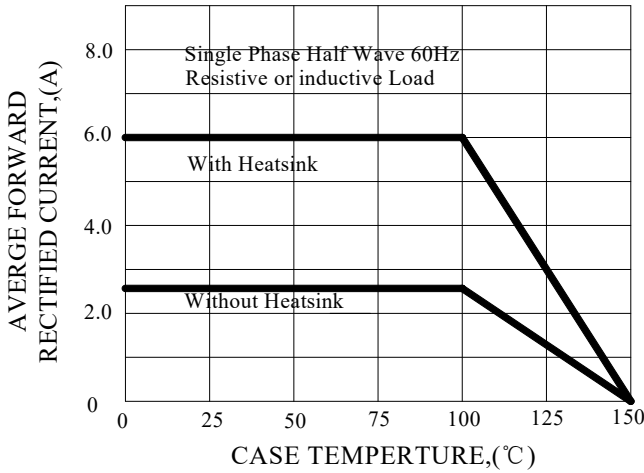


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

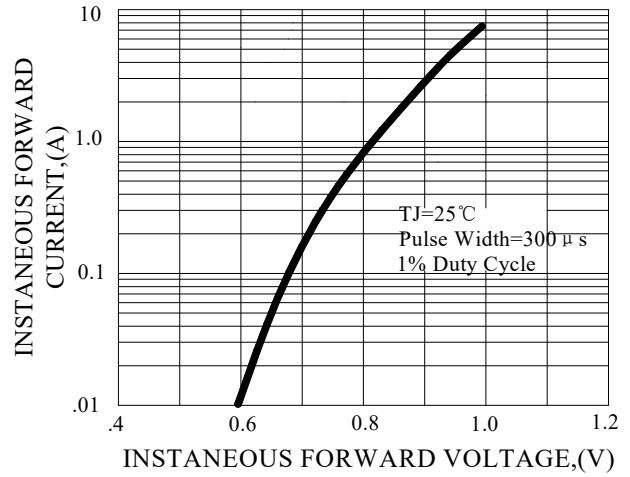


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

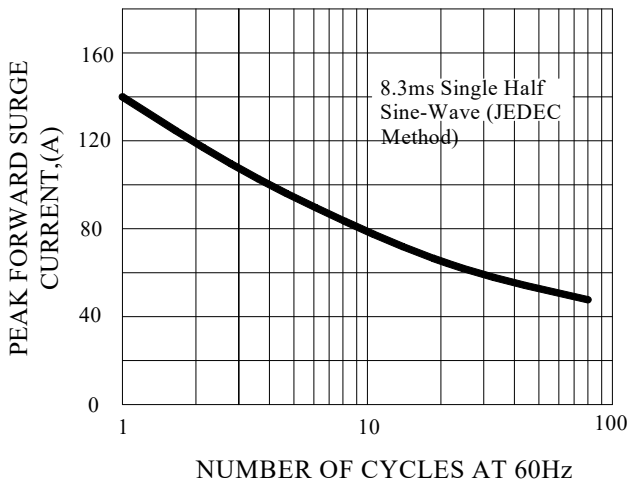


FIG.4-TYPICAL JUNCTION CAPACITANCE

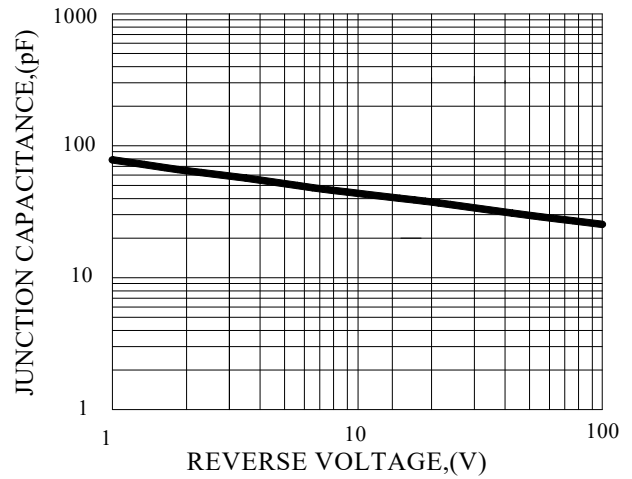
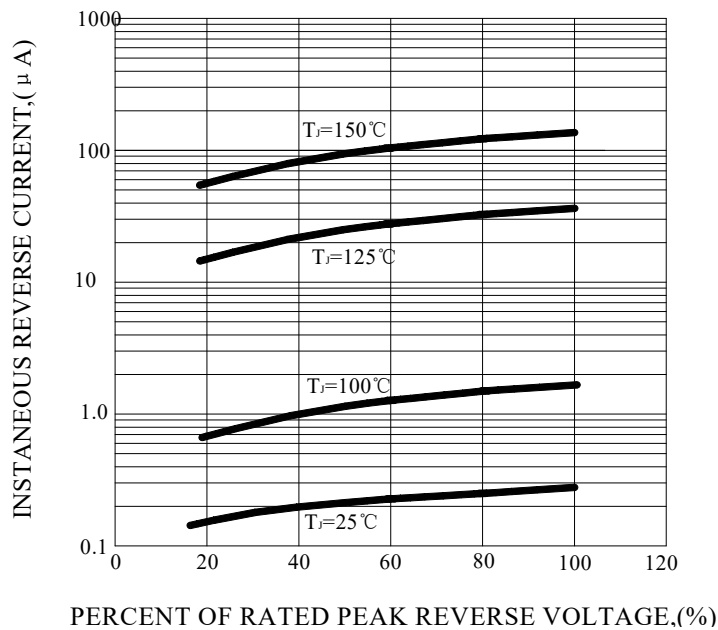
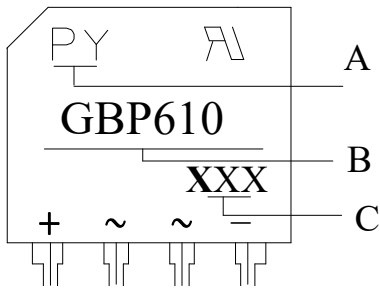


FIG.5-TYPICAL REVERSE CHARACTERISTICS



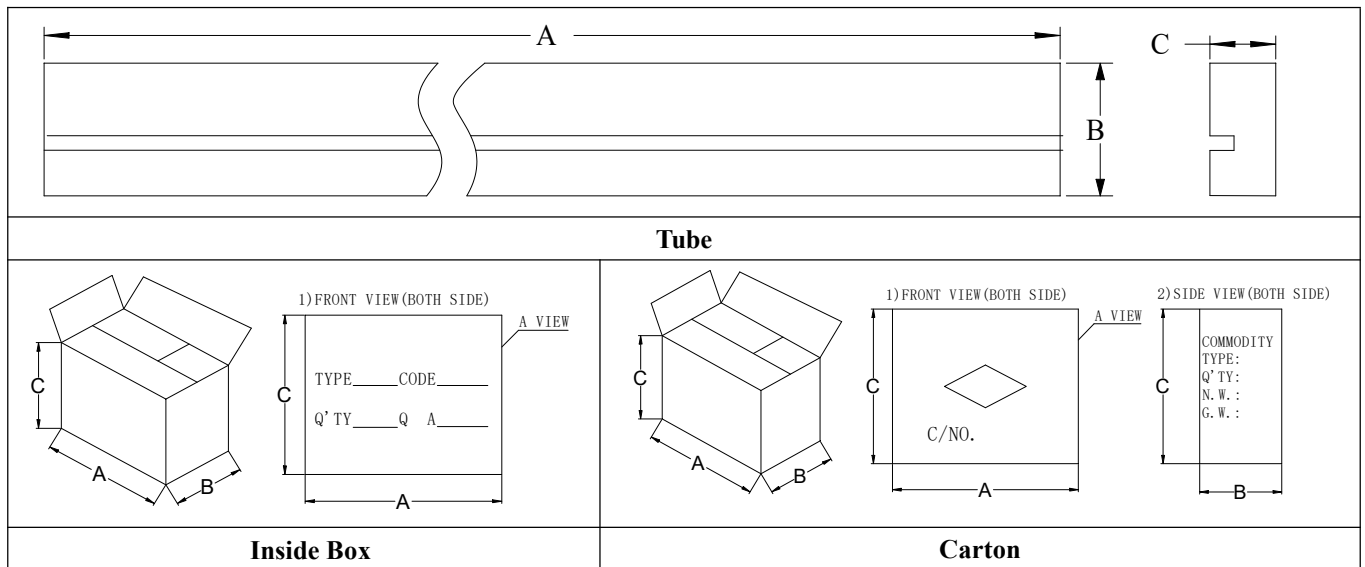
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Trademark
B	Product Name
C	Date Code

2、Packaging



OUTLINE	A (mm)	B (mm)	C (mm)
Tube	390±1	28.8±1	6.1±1
Inside box	395±3	155±3	155±3
Carton	420±5	180±5	325±5

COUNT	TUBE (PCS)	BOX (PCS)	CARTON (PCS)
GBP	25	2500	5000