GBPR210

SINGLE PHASE2.0AMPS.GLASS PASSIVATED FAST BRIDGE RECTIFIERS

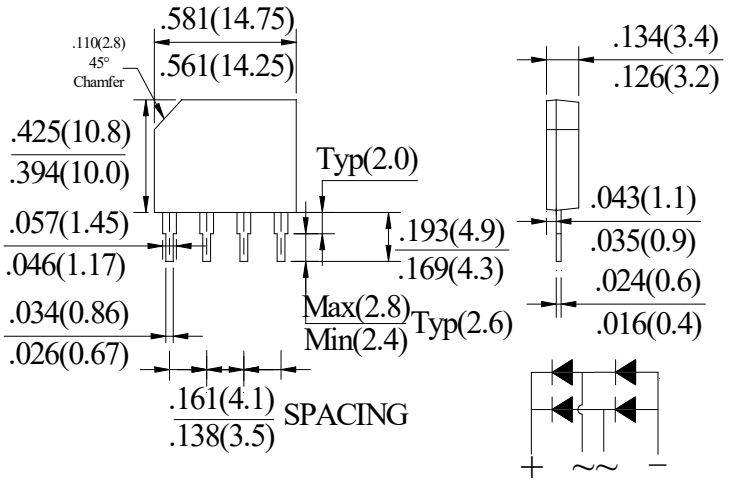
FEATURE

. UL Listed Under Recognized Component Index, File Number E338195
. Glass passivated chip junctions
. High case dielectric stength
. Low Reverse Leakage Current
. High surge current capability
. Ideal for Printed Circuit Board Applications

MECHANICAL DATA

. 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

GBP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz,resistive or inductive load. For capacitive load, derate current by 20%

Type Number	SYMBOL	GBPR210	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 Output Current	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	60	A
Maximum Forward Voltage Drop per element at 2.0A DC	V_F	1.3	V
Maximum DC Reverse Current @T_A =25°C at rated DC blocking voltage @T_A =125°C	I_R	10.0 500.0	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	500	nS
I^2t Rating for Fusing (t < 8.3ms)	I^2t	14.9	A^2Sec
Typical Junction Capacitance (Note 1)	C_J	20	pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	7.5	°C/W
Storage Temperature	T_{STG}	-55 to +150	°C
Operating Junction Temperature	T_J	-55 to +150	°C

Note:

1.Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3.Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

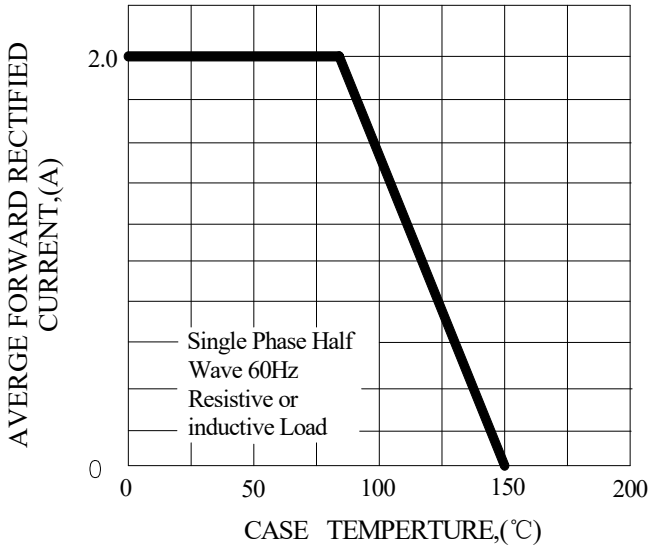


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

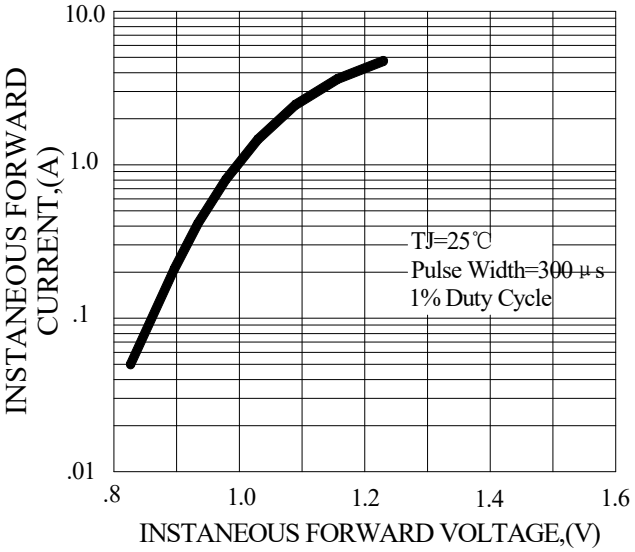


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

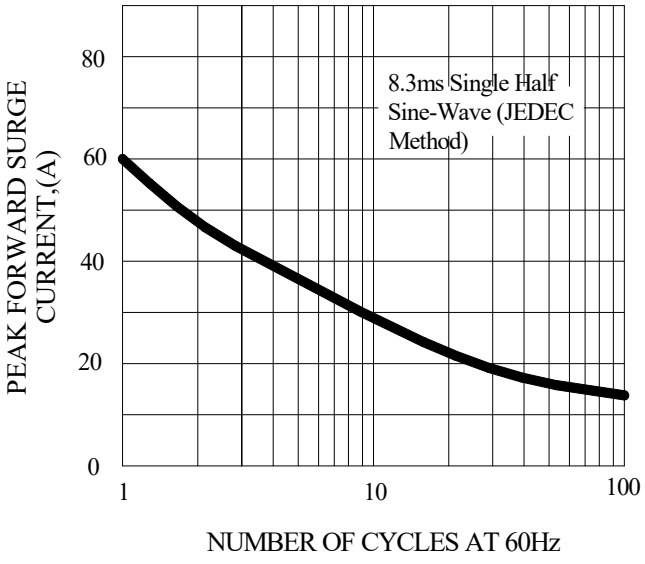


FIG.4-TYPICAL REVERSE CHARACTERISTICS

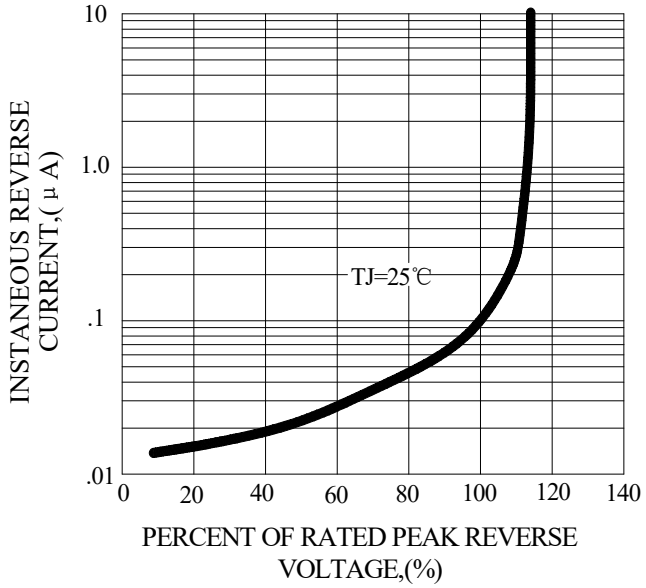
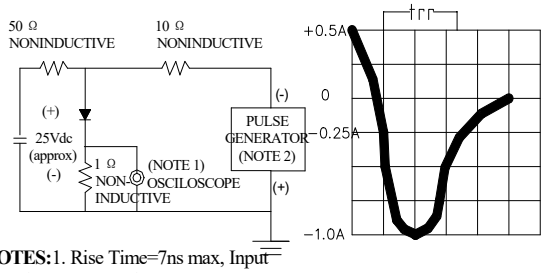


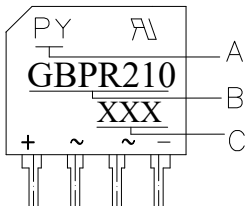
FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERSITIC



NOTES:1. Rise Time=7ns max, Input Impedance= 1 megohm.22pF.
2. Rise Time=10ns max, Souce Impedance= 50 ohms.

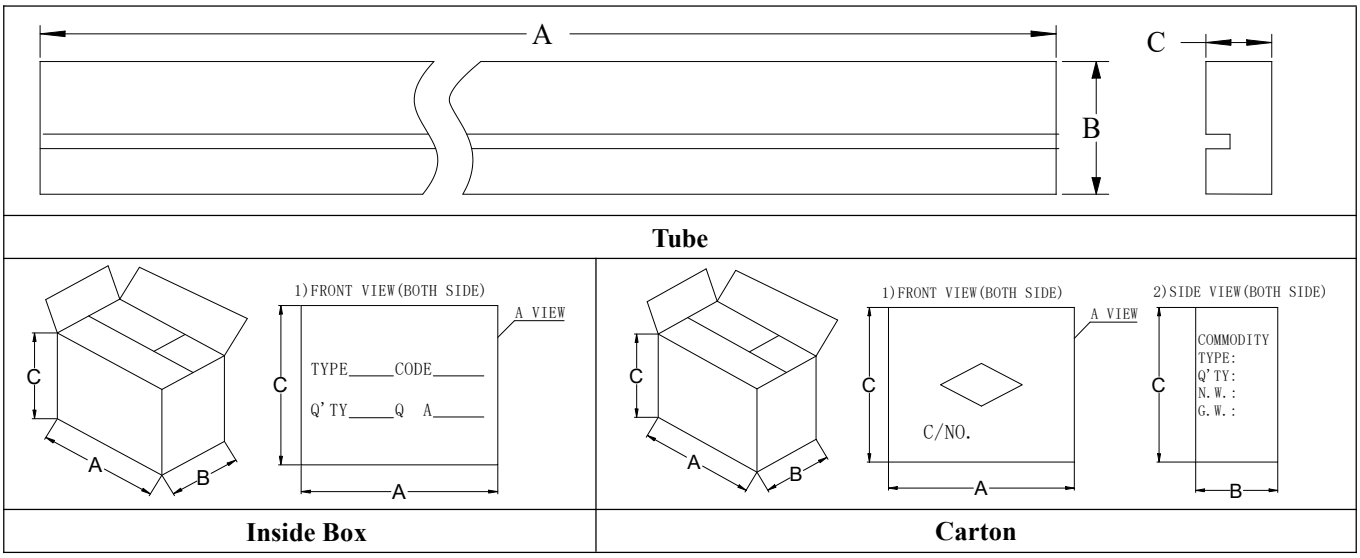
Marking and packaging illustration

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