

GBP206 THRU GBP210

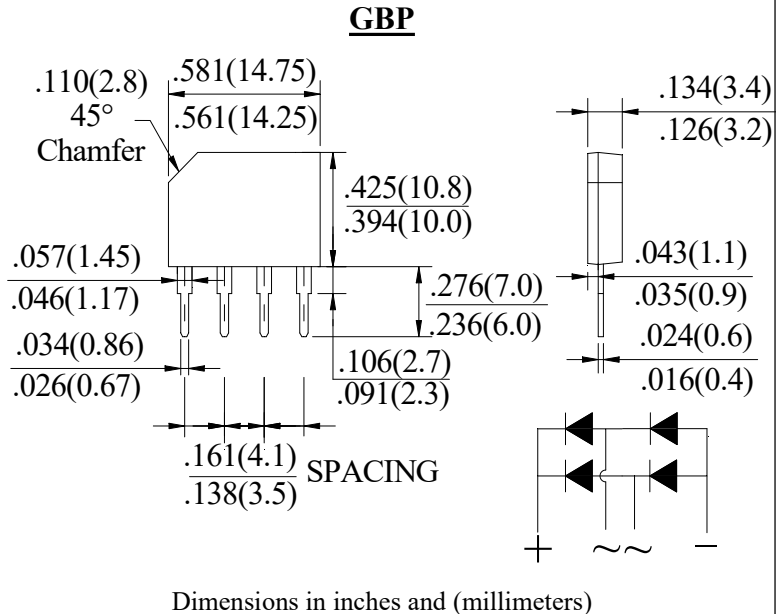
SINGLE PHASE 2.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

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



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 | GBP206 | GBP208 | GBP210 | units |
|--|-------------|--------------|--------|--------|---------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 420 | 560 | 700 | V |
| Maximum DC blocking Voltage | V_{DC} | 600 | 800 | 1000 | V |
| Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_C=100^{\circ}C$ (without heatsink) | $I_{F(AV)}$ | 2.0 1.0 | | | A |
| Peak Forward Surge Current single half sine-wave superimposed on rate load | I_{FSM} | 60 120 | | | A |
| Maximum Forward Voltage @ 2.0A DC Drop per element @ 1.0A 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 | 14.9 | | | A^2Sec |
| Typical Junction Capacitance (Note 1) | C_J | 25 | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{(JA)}$ | 35 | | | $^{\circ}C/W$ |
| | $R_{(JL)}$ | 2.0 | | | |
| | $R_{(JC)}$ | 2.2 | | | |
| 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 50mm x 50mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

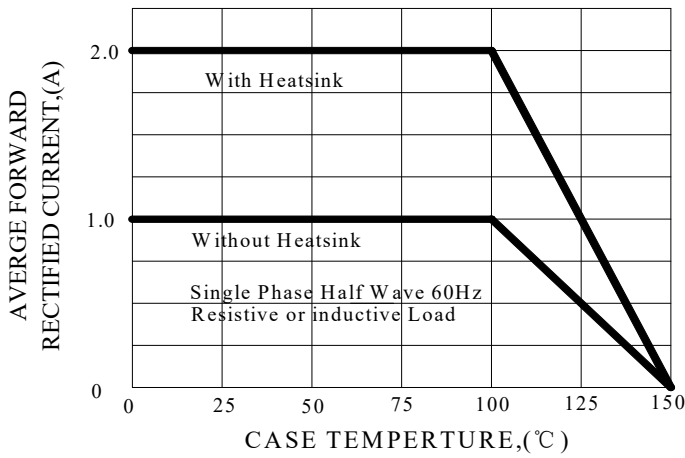


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

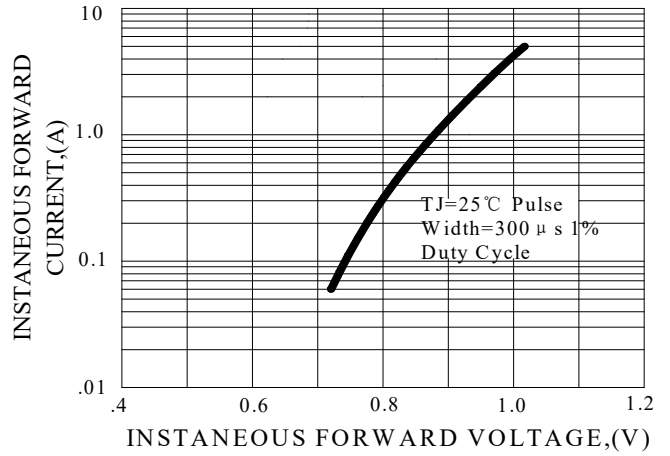


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

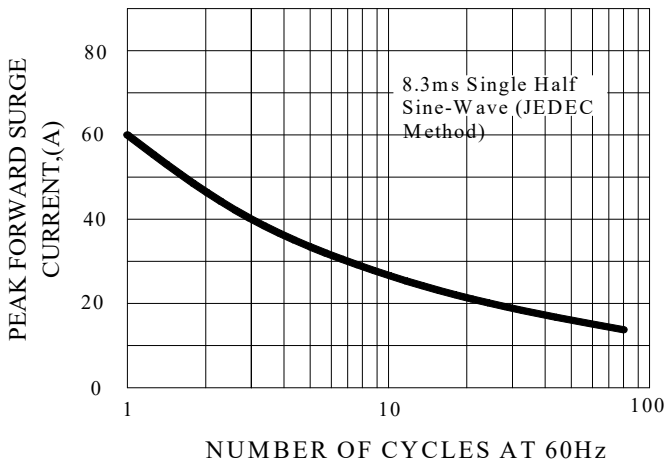


FIG.4-TYPICAL JUNCTION CAPAOTANCE

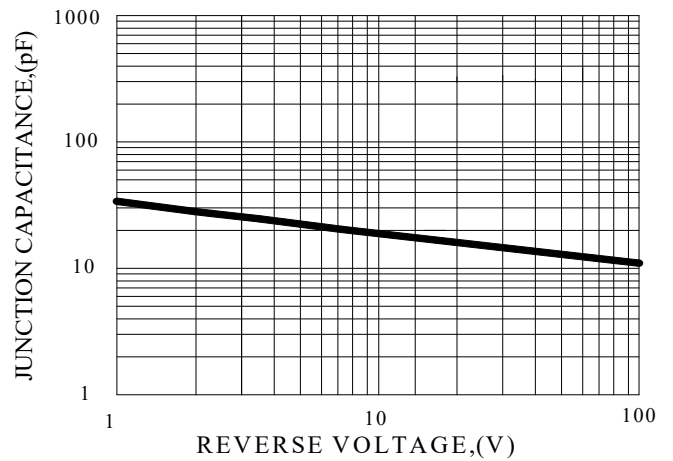
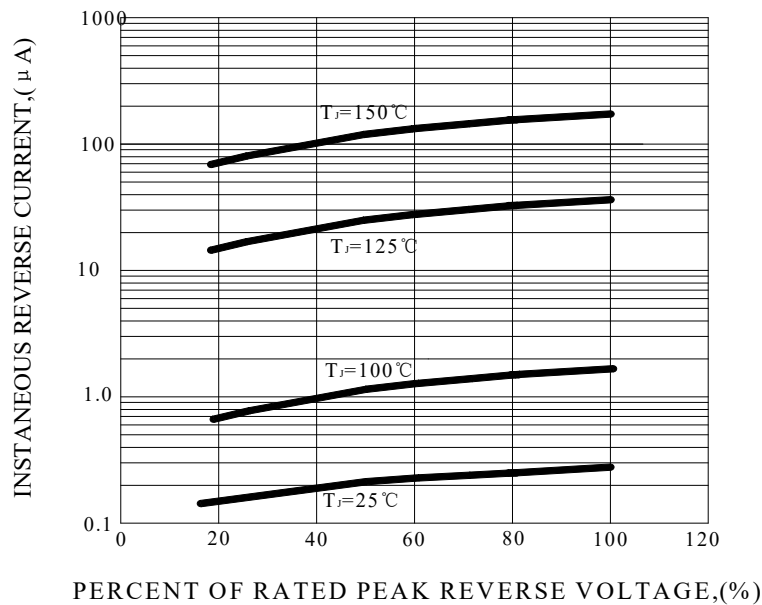
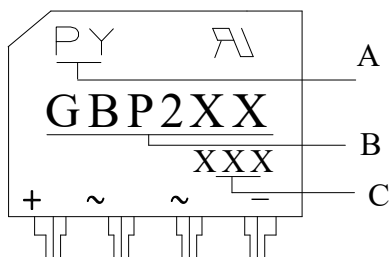


FIG.5-TYPICAL REVERSE CHARACTERISTICS



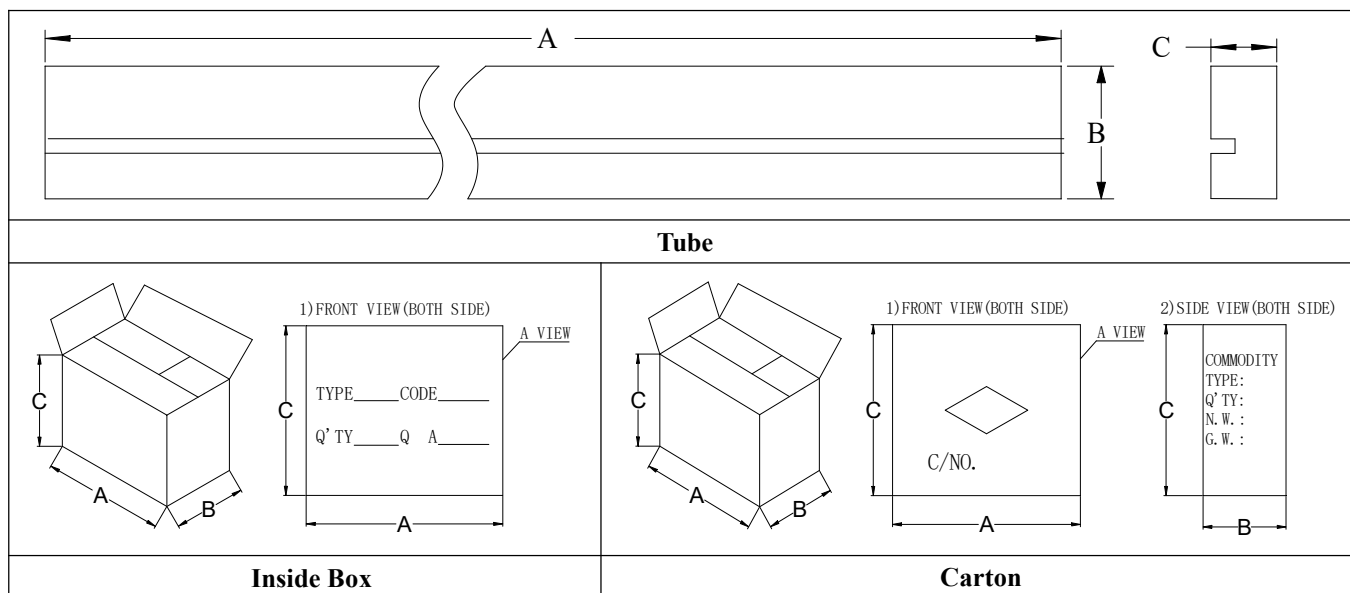
Marking and packaging illustration

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 |