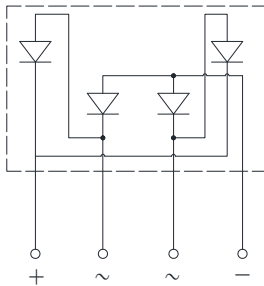
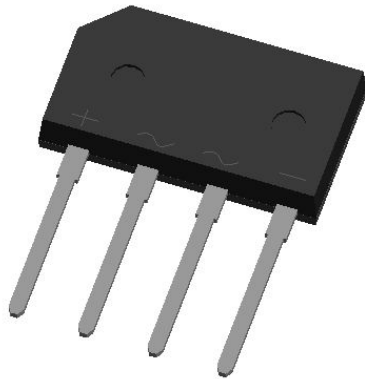


## Bridge Rectifiers



### Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

### Mechanical Data

- **Package:** 2KBJ  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

| PARAMETER  | SYMBOL           | UNIT             | GBL2005A   | GBL201A | GBL202A | GBL204A | GBL206A | GBL208A | GBL210A |
|--|------------------|------------------|------------|---------|---------|---------|---------|---------|---------|
| Device marking code  |                  |                  | GBL2005A   | GBL201A | GBL202A | GBL204A | GBL206A | GBL208A | GBL210A |
| Maximum Repetitive Peak Reverse Voltage  | VRRM             | V                | 50         | 100     | 200     | 400     | 600     | 800     | 1000    |
| Maximum RMS Voltage  | VRMS             | V                | 35         | 70      | 140     | 280     | 420     | 560     | 700     |
| Maximum DC blocking Voltage  | VDC              | V                | 50         | 100     | 200     | 400     | 600     | 800     | 1000    |
| Average Rectified Output Current<br>@60Hz sine wave, R-load, Ta=40°C             | IO               | A                | 2.0        |         |         |         |         |         |         |
| Forward Surge Current (Non-repetitive)<br>@60Hz Half-sine wave, 1 cycle, Tj=25°C | IFSM             | A                | 120        |         |         |         |         |         |         |
| Forward Surge Current (Non-repetitive)<br>@1ms, square wave, 1 cycle, Tj=25°C    |                  |                  | 240        |         |         |         |         |         |         |
| Current squared time<br>@1ms≤t≤8.3ms Tj=25°C, rating of per diode                | I <sup>2</sup> t | A <sup>2</sup> S | 59.8       |         |         |         |         |         |         |
| Dielectric strength<br>@ terminals to case, AC 1 minute                          | Vdis             | KV               | 2          |         |         |         |         |         |         |
| Storage temperature  | Tstg             | °C               | -55 ~ +150 |         |         |         |         |         |         |
| Junction temperature   | Tj               | °C               | -55 ~ +150 |         |         |         |         |         |         |

### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

| PARAMETER   | SYMBOL | UNIT | TEST CONDITIONS   | GBL2005A | GBL201A | GBL202A | GBL204A | GBL206A | GBL208A | GBL210A |
|---|--------|------|---|----------|---------|---------|---------|---------|---------|---------|
| Maximum instantaneous forward voltage drop per diode              | VF     | V    | IFM=1.0A  | 1.0      |         |         |         |         |         |         |
| Maximum DC reverse current at rated DC blocking voltage per diode | IR     | μA   | Tj=25°C   | 5        |         |         |         |         |         |         |
|   |        |      | Tj=125°C  | 100      |         |         |         |         |         |         |
| Typical junction capacitance                                      | Cj     | pF   | Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C | 38       |         |         |         |         |         |         |



# GBL2005A THRU GBL210A

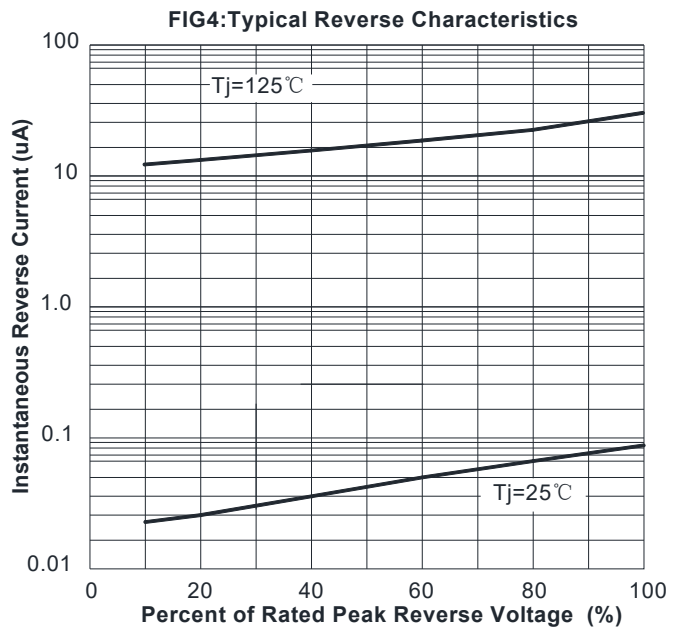
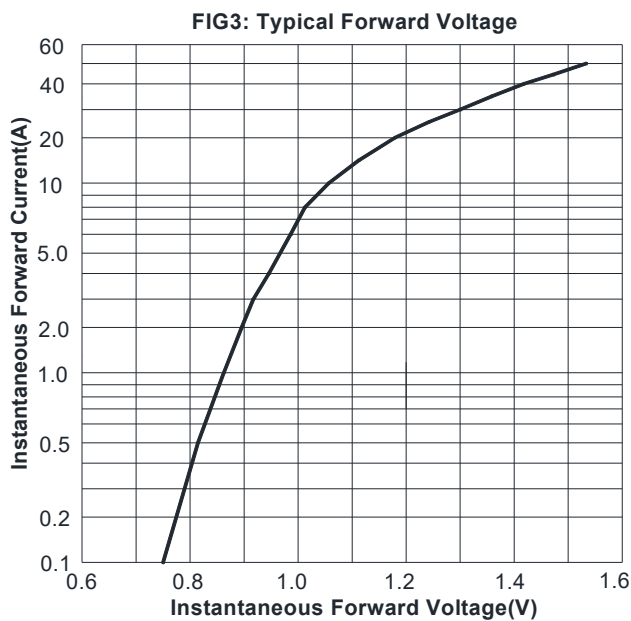
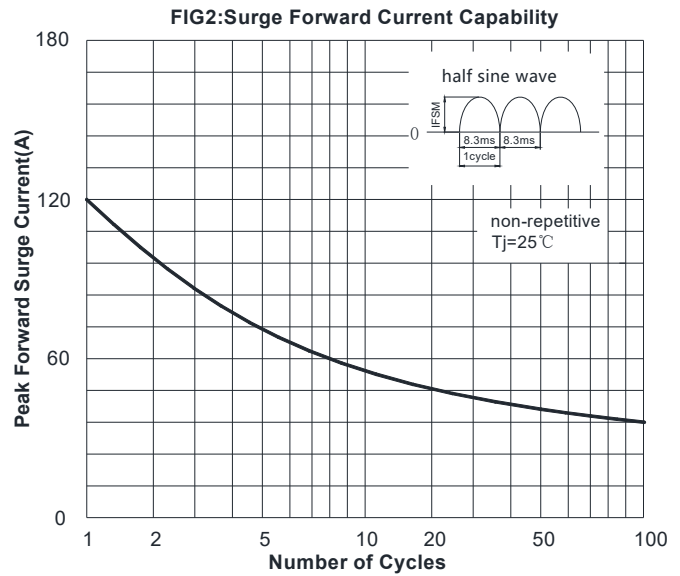
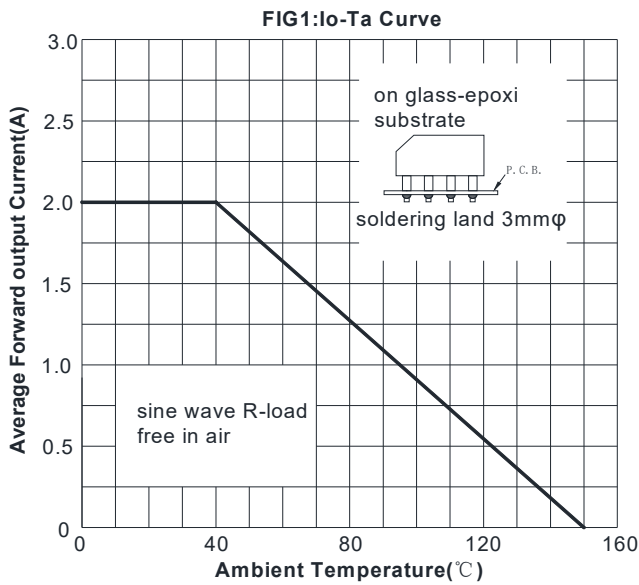
## ■ Thermal Characteristics (Ta=25°C Unless otherwise specified)

| PARAMETER          |                              | SYMBOL         | UNIT | GBL2005A | GBL201A | GBL202A | GBL204A | GBL206A | GBL208A | GBL210A |
|--------------------|------------------------------|----------------|------|----------|---------|---------|---------|---------|---------|---------|
| Thermal Resistance | Between junction and ambient | R $\theta$ J-A | °C/W | 47       |         |         |         |         |         |         |
|                    | Between junction and case    | R $\theta$ J-C |      | 10       |         |         |         |         |         |         |

## ■ Ordering Information (Example)

| PREFERRED P/N      | PACKAGE CODE | UNIT WEIGHT(g)   | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------------|--------------|------------------|----------------------|-------------------------|----------------------------|---------------|
| GBL2005A – GBL210A | B1           | Approximate 2.19 | 22                   | 1320                    | 5280                       | Tube          |

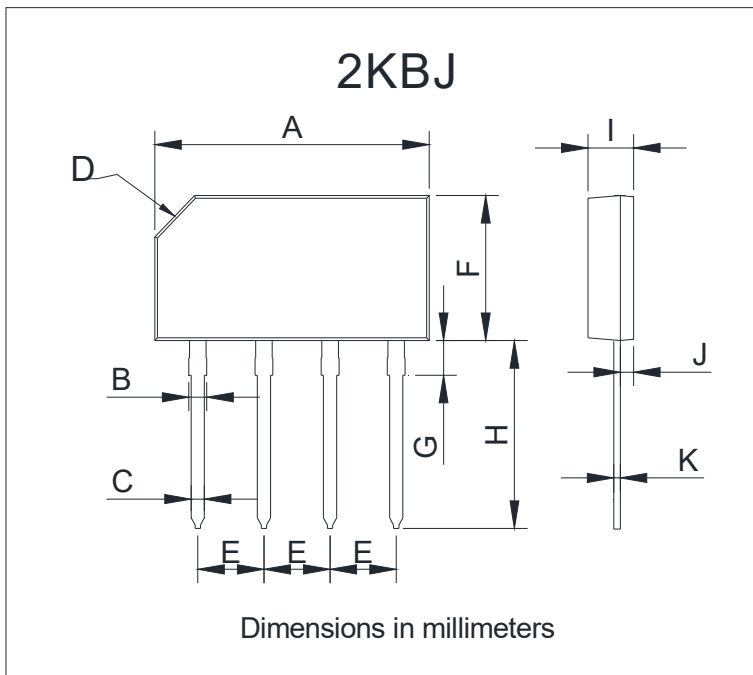
## ■ Characteristics(Typical)





## GBL2005A THRU GBL210A

### ■ Outline Dimensions



| 2KBJ |          |      |
|------|----------|------|
| Dim  | Min      | Max  |
| A    | 19.2     | 21.2 |
| B    | 1.2      | 1.8  |
| C    | 1.0      | 1.2  |
| D    | Typ: 3.0 |      |
| E    | 4.9      | 5.1  |
| F    | 10.5     | 11.5 |
| G    | 2.0      | 3.0  |
| H    | 13.0     | 15.0 |
| I    | 3.0      | 4.0  |
| J    | 0.9      | 1.1  |
| K    | 0.4      | 0.6  |



## GBL2005A THRU GBL210A

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