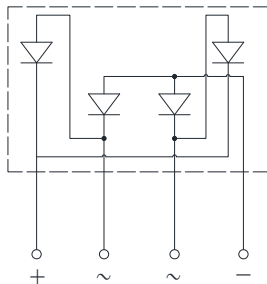
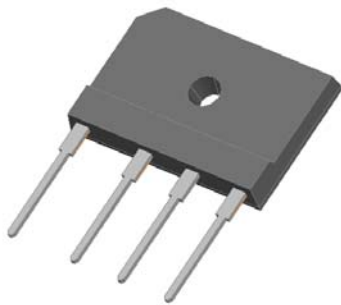


## Low VF Bridge Rectifiers



### 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:** 6KBJ  
Molding compound meets UL 94 V-0 flammability rating, -
- **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  | GBJL2008   |
|----------------------------------------------------------------------------------|-----------------------------|--------|-------|------------|
| Device marking code                                                              |                             |        |       | GBJL2008   |
| Maximum Repetitive Peak Reverse Voltage                                          |                             | VRRM   | V     | 800        |
| Maximum RMS Voltage                                                              |                             | VRMS   | V     | 560        |
| Maximum DC blocking Voltage                                                      |                             | VDC    | V     | 800        |
| Average rectified output current<br>@60Hz sine wave, R-load                      | With heatsink<br>Tc =110°C  | IO     | A     | 20         |
|                                                                                  | Without heatsink<br>Ta=25°C |        |       | 3.5        |
| Forward Surge Current (Non-repetitive)<br>@60Hz Half-sine wave, 1 cycle, Tj=25°C |                             | IFSM   | A     | 400        |
| Forward Surge Current (Non-repetitive)<br>@1ms, square wave, 1 cycle, Tj=25°C    |                             |        |       | 800        |
| Current squared time<br>@1ms≤t≤8.3ms Tj=25°C, Rating of per diode                |                             | I²t    | A²S   | 664        |
| Storage temperature                                                              |                             | Tstg   | °C    | -55 ~ +150 |
| Junction temperature                                                             |                             | Tj     | °C    | -55 ~ +150 |
| Dielectric strength<br>@ Terminals to case, AC 1 minute                          |                             | Vdis   | KV    | 2.5        |
| Mounting torque<br>@Recommend torque: 5kg·cm                                     |                             | Tor    | kg·cm | 8          |

## ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                                                         | SYMBOL         | UNIT | TEST CONDITIONS                                           | GBJL2008 |
|-------------------------------------------------------------------|----------------|------|-----------------------------------------------------------|----------|
| Maximum instantaneous forward voltage drop per diode              | V <sub>F</sub> | V    | I <sub>FM</sub> =10A                                      | 0.92     |
| Maximum DC reverse current at rated DC blocking voltage per diode | I <sub>R</sub> | μA   | T <sub>j</sub> =25°C                                      | 5        |
|                                                                   |                |      | T <sub>j</sub> =125°C                                     | 200      |
| Typical junction capacitance                                      | C <sub>j</sub> | pF   | Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C | 197      |

## ■Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                  |                                                | SYMBOL            | UNIT | GBJL2008 |
|----------------------------|------------------------------------------------|-------------------|------|----------|
| Typical Thermal Resistance | Between junction and ambient, Without heatsink | R <sub>θJ-A</sub> | °C/W | 18       |
|                            | Between junction and case, With heatsink       | R <sub>θJ-C</sub> |      | 1.5      |

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

## ■Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g)  | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|-----------------|----------------------|-------------------------|----------------------------|---------------|
| GBJL2008      | B1           | Approximate 6.5 | 15                   | 750                     | 1500                       | TUBE          |

## ■ Characteristics(Typical)

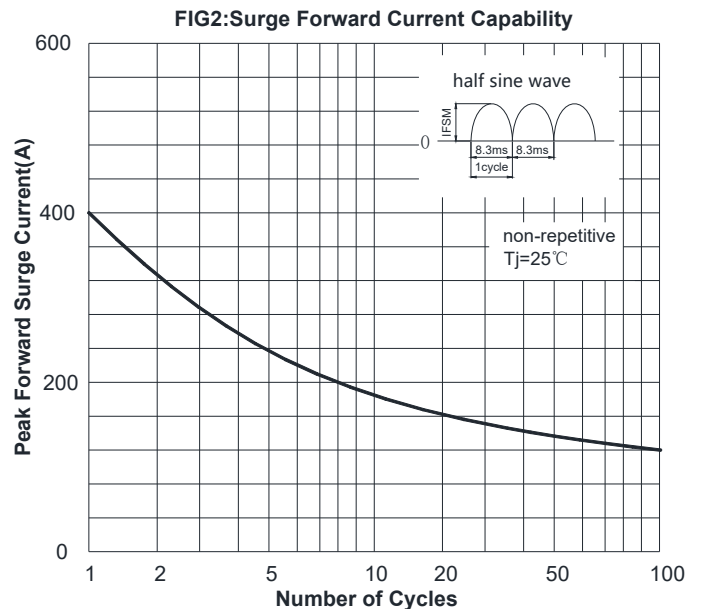
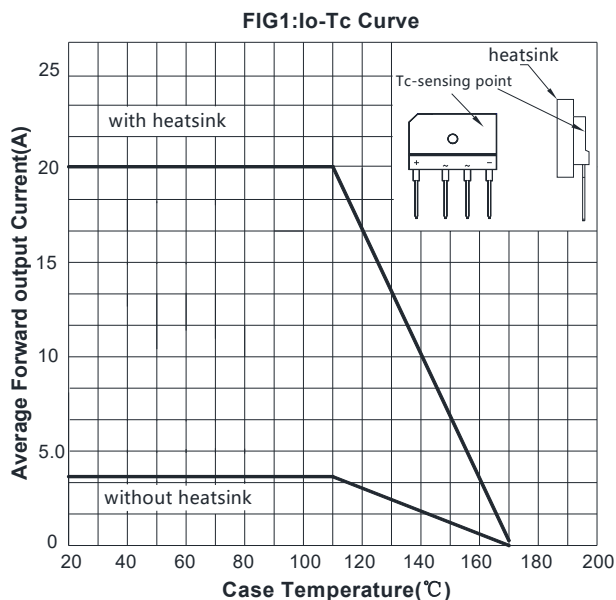


FIG3: Typical Forward Voltage

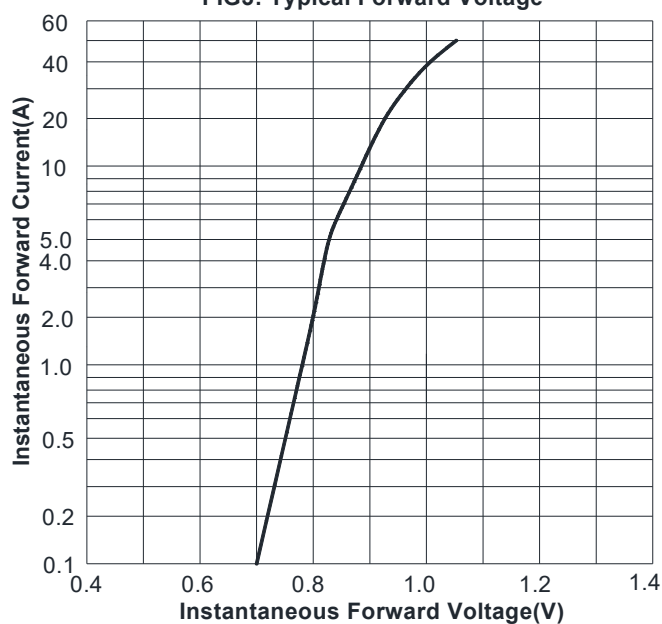
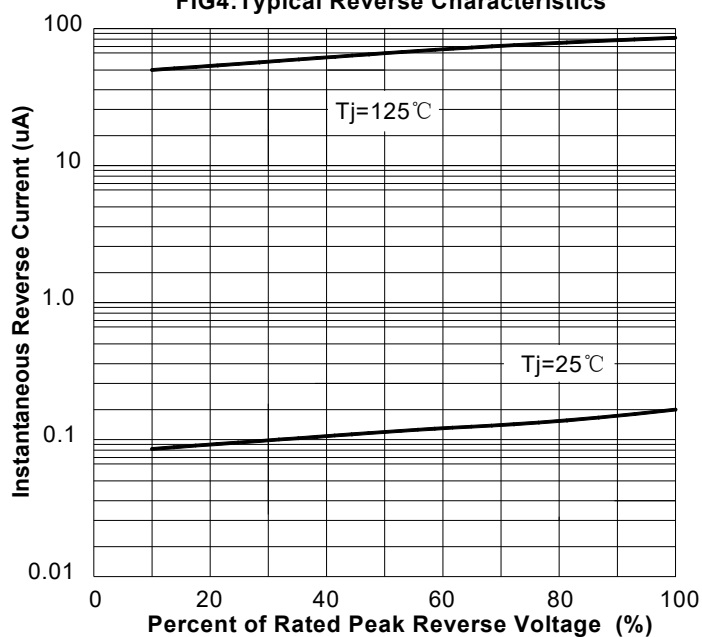
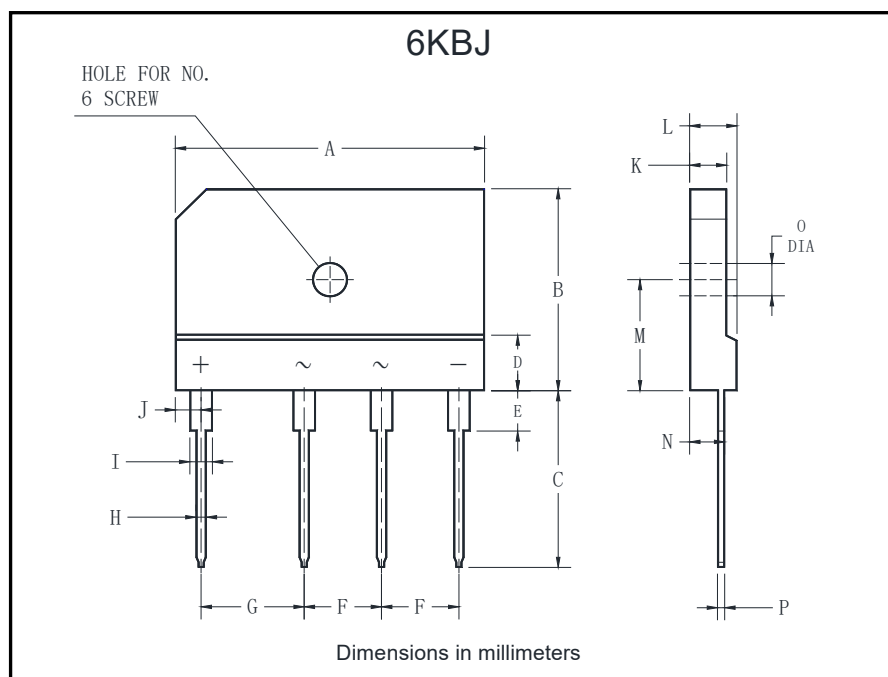


FIG4: Typical Reverse Characteristics



## ■ Outline Dimensions



| 6KBJ |      |      |
|------|------|------|
| Dim  | Min  | Max  |
| A    | 29.7 | 30.3 |
| B    | 19.7 | 20.3 |
| C    | 17.0 | 18.0 |
| D    | 4.8  | 5.8  |
| E    | 3.8  | 4.2  |
| F    | 7.3  | 7.7  |
| G    | 9.8  | 10.2 |
| H    | 0.9  | 1.1  |
| I    | 2.0  | 2.4  |
| J    | 2.3  | 2.7  |
| K    | 3.4  | 3.8  |
| L    | 4.4  | 4.8  |
| M    | 10.8 | 11.2 |
| N    | 3.1  | 3.7  |
| O    | 3.1  | 3.4  |
| P    | 0.6  | 0.8  |

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