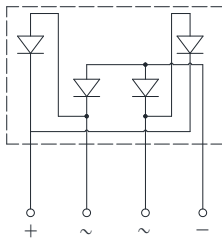
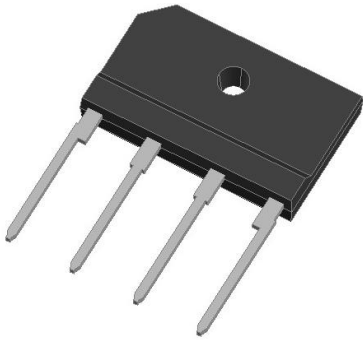


Bridge Rectifiers



Features

- UL recognition, file #E230084
- 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:** 4KBJ
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 (T_a=25°C Unless otherwise specified)

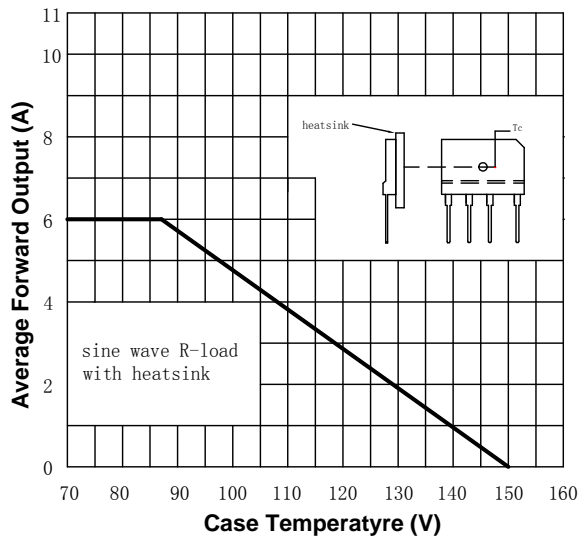
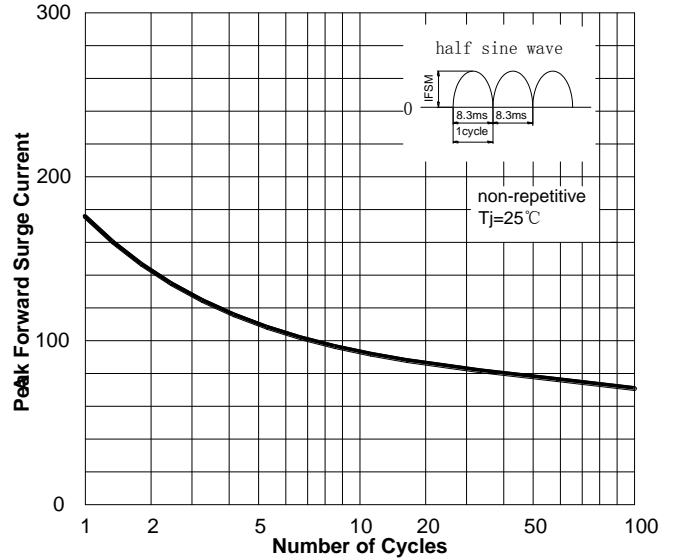
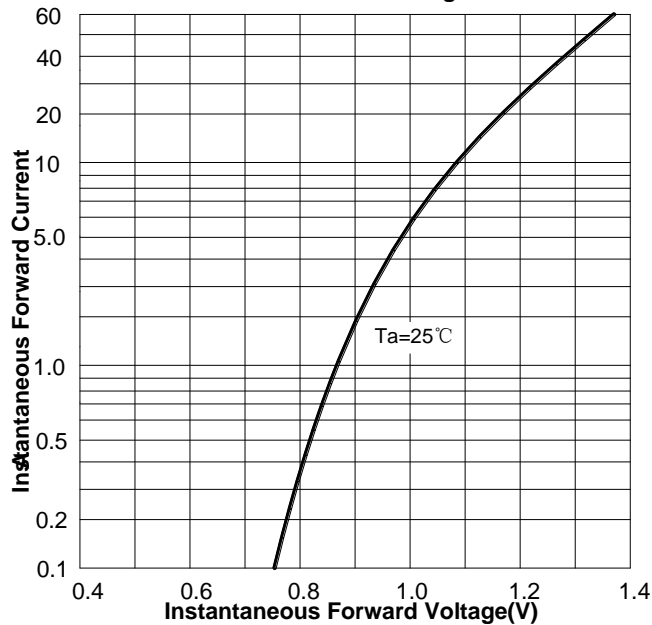
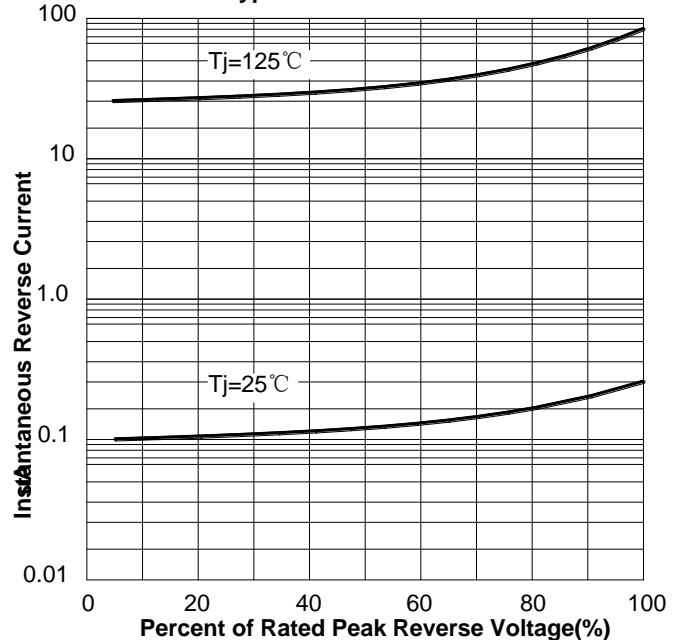
| PARAMETER | SYMBOL | UNIT | GBJ6005 | GBJ601 | GBJ602 | GBJ604 | GBJ606 | GBJ608 | GBJ610 |
|------------------------------------------------------------------------------------------|------------------------------------------|------------------|-----------|--------|--------|--------|--------|--------|--------|
| Device marking code | | | GBJ6005 | GBJ601 | GBJ602 | GBJ604 | GBJ606 | GBJ608 | GBJ610 |
| Repetitive peak reverse voltage | VRRM | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average rectified output current @60Hz sine wave, R-load | With heatsink T _c =87°C | I _O | A | 6.0 | | | | | |
| | Without heatsink T _a =25°C | | | 3.5 | | | | | |
| Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25°C | IFSM | A | 175 | | | | | | |
| Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode | I ² t | A ² s | 127 | | | | | | |
| Storage temperature | T _{stg} | °C | -55 ~+150 | | | | | | |
| Junction temperature | T _j | °C | -55 ~+150 | | | | | | |
| Dielectric strength @ terminals to case, AC 1 minute | V _{dis} | KV | 2.5 | | | | | | |
| Mounting torque @recommend torque: 5kg·cm | Tor | kg·cm | 8 | | | | | | |

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

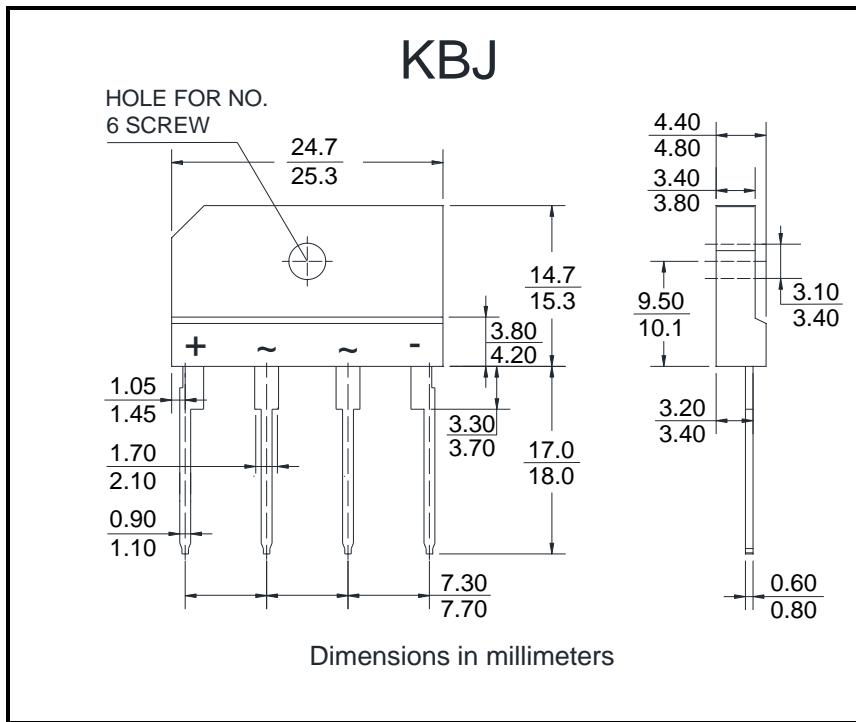
| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | GBJ6005 | GBJ601 | GBJ602 | GBJ604 | GBJ606 | GBJ608 | GBJ610 |
|-------------------------------------------------------------------|------------------|------|-----------------|---------|--------|--------|--------|--------|--------|--------|
| Maximum instantaneous forward voltage drop per diode | V _F | V | IFM=3.0A | 1.00 | | | | | | |
| Maximum DC reverse current at rated DC blocking voltage per diode | I _{RRM} | μA | VRM=VRRM | 5 | | | | | | |

■ Thermal Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

| PARAMETER | | SYMBOL | UNIT | GBJ6005 | GBJ601 | GBJ602 | GBJ604 | GBJ606 | GBJ608 | GBJ610 |
|--------------------|------------------------------------------------|------------------|-----------------------------|---------|--------|--------|--------|--------|--------|--------|
| Thermal Resistance | Between junction and ambient, Without heatsink | $R_{\theta J-A}$ | $^{\circ}\text{C}/\text{W}$ | 26.0 | | | | | | |
| | Between junction and case, With heatsink | $R_{\theta J-C}$ | | 3.4 | | | | | | |

■ Characteristics (Typical)
FIG1: I_0 - T_c Curve

FIG2: Surge Forward Current Capability

FIG3: Forward Voltage

FIG4: Typical Reverse Characteristics


■ Outline Dimensions



| 4KBJ | | |
|------|------|------|
| Dim | Min | Max |
| A | | |
| B | 1.05 | 1.45 |
| C | 1.7 | 2.1 |
| D | 0.9 | 1.1 |
| E | 7.3 | 7.7 |
| F | 14.7 | 15.3 |
| G | 3.8 | 4.2 |
| H | 3.3 | 3.7 |
| I | 3.1 | 3.4 |
| J | 4.4 | 4.8 |
| K | 3.4 | 3.8 |
| L | 3.2 | 3.4 |
| M | 0.6 | 0.8 |
| N | 17.0 | 18.0 |
| O | 9.5 | 10.1 |