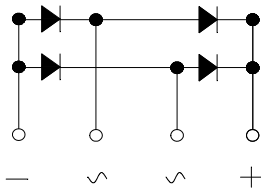
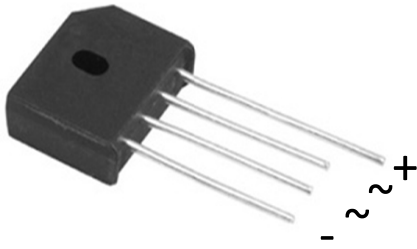


Bridge Rectifiers



Features

- UL recognition, file #E230084
- Ideal for printed circuit boards
- 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:** KBU
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 | KBU25005 | KBU2501 | KBU2502 | KBU2504 | KBU2506 | KBU2508 | KBU2510 |
|--|------------------|------------------|-----------|---------|---------|---------|---------|---------|---------|
| Device marking code | | | KBU25005 | KBU2501 | KBU2502 | KBU2504 | KBU2506 | KBU2508 | KBU2510 |
| Repetitive Peak Reverse Voltage | VRRM | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average Rectified Output Current @60Hz sine wave, R-load, T _c =115°C | I _O | A | 25 | | | | | | |
| Surge(Non-repetitive)Forward Current @60Hz half-sine wave, 1 cycle, T _a =25°C | I _{FSM} | A | 400 | | | | | | |
| Current Squared Time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode | I ² t | A ² S | 666 | | | | | | |
| Storage Temperature | T _{stg} | °C | -55 ~+150 | | | | | | |
| Junction Temperature | T _j | °C | -55 ~+150 | | | | | | |

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

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | KBU25005 | KBU2501 | KBU2502 | KBU2504 | KBU2506 | KBU2508 | KBU2510 |
|---|------------------|------|------------------------|----------|---------|---------|---------|---------|---------|---------|
| Maximum instantaneous forward voltage drop per diode | V _F | V | I _{FM} =12.5A | 1.1 | | | | | | |
| Maximum DC reverse current at rated DC blocking voltage per diode | I _{RRM} | μA | V _{RM} =VRRM | 10 | | | | | | |

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

| PARAMETER | SYMBOL | UNIT | KBU25005 | KBU2501 | KBU2502 | KBU2504 | KBU2506 | KBU2508 | KBU2510 |
|---|-------------------|------|--------------------|---------|---------|---------|---------|---------|---------|
| Thermal Resistance Between junction and case, | R _{θJ-C} | °C/W | 1.4 ⁽¹⁾ | | | | | | |

Notes

(1) Units Mounted on an aluminum plate heat sink.



KBU25005 THRU KBU2510

Ordering Information (Example)

| PREFERRED P/N | PACKAGE CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|------------------|--------------|-----------------|----------------------|-------------------------|----------------------------|---------------|
| KBU25005~KBU2510 | A1 | Approximate 7.2 | 400 | 400 | 2400 | Paper Box |

Characteristics(Typical)

FIG1:Io-Tc Curve

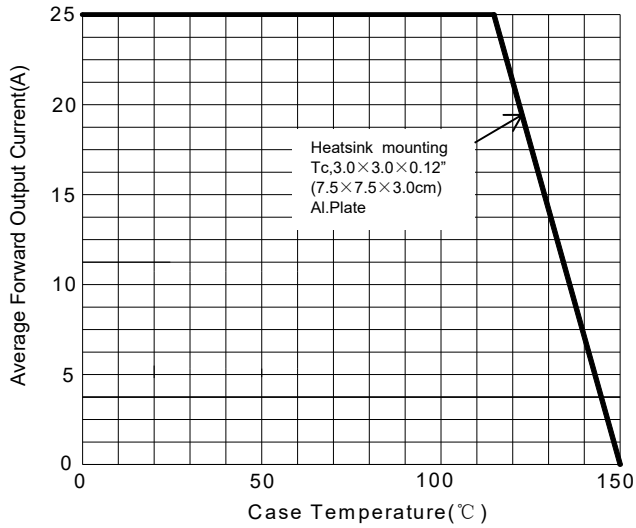


FIG2: Surge Forward Current Capability

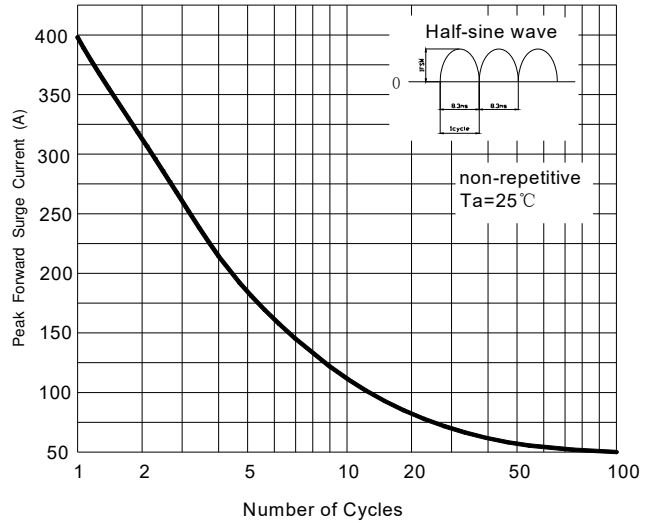


FIG3: Instantaneous Forward Voltage

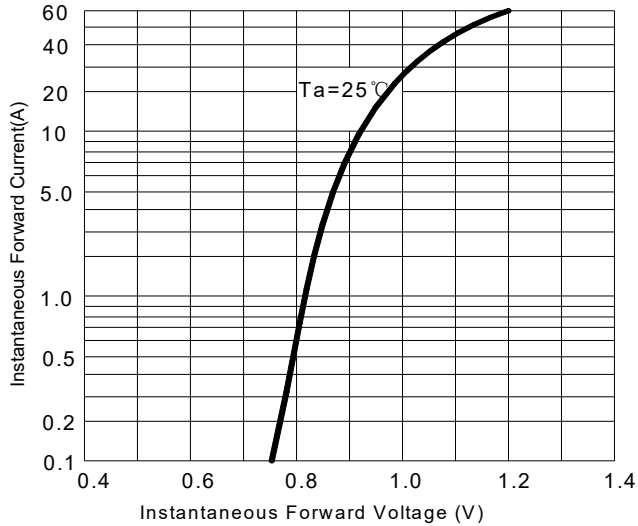
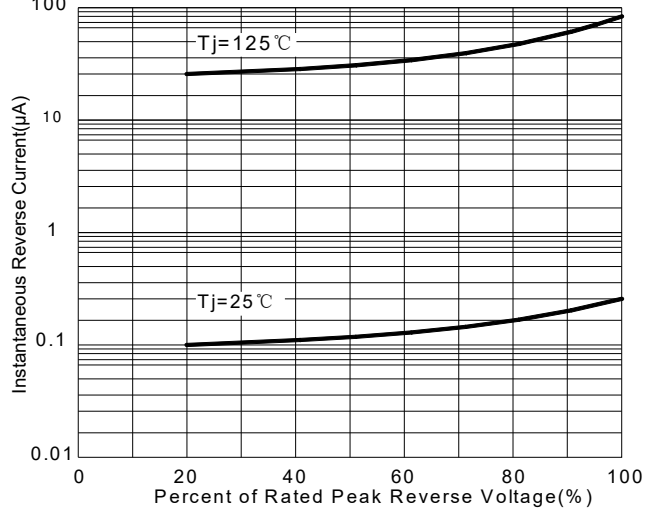


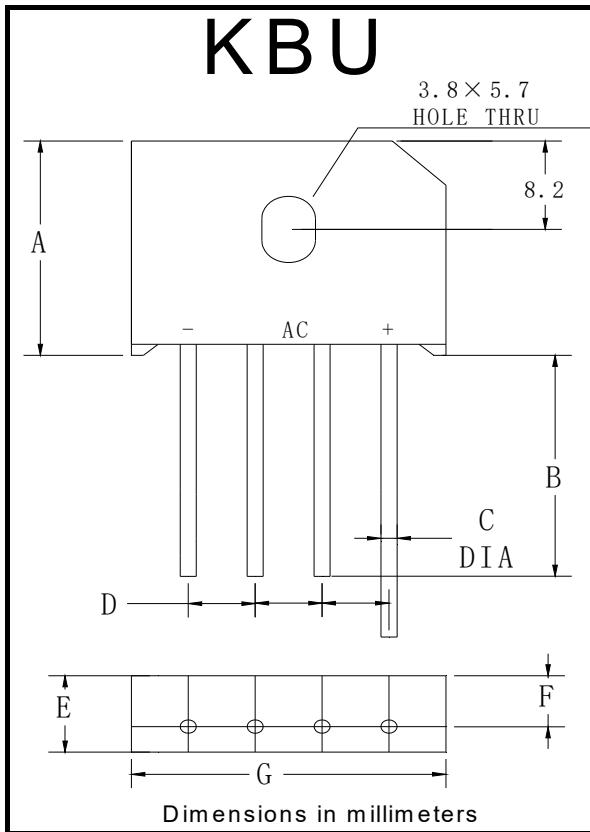
FIG4: Typical Reverse Characteristics





KBU25005 THRU KBU2510

■ Outline Dimensions



| KBU | | |
|-----|------|------|
| Dim | Min | Max |
| A | 18.8 | 19.8 |
| B | 20.0 | / |
| C | 1.2 | 1.3 |
| D | 4.6 | 5.6 |
| E | 6.8 | 7.1 |
| F | 4.6 | 5.0 |
| G | 22.7 | 23.7 |



KBU25005 THRU KBU2510

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