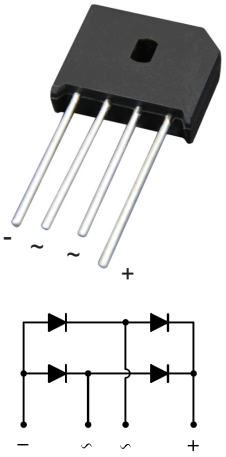
# KBU1010

13-NOV-2020

## Glass Passivated Bridge Rectifiers




### Features

- Low Reverse Leakage Current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance: 260℃/10sec

### Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

### Maximum Ratings and Electrical characteristics

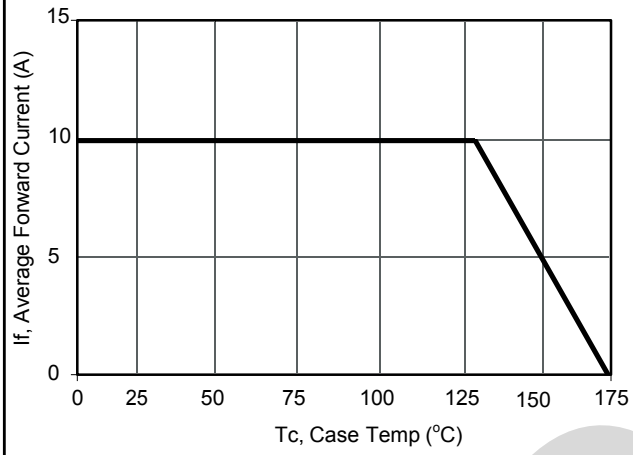
Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter | Symbols | KBU1010 | Units |
|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 1000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 1000 | V |
| Average Rectified Output Current | $I_o$ | 10.0 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 200 | A |
| $I^2t$ rating for fusing ( 1ms< t < 8.3ms) | $I^2t$ | 166 | $A^2S$ |
| Maximum Forward Voltage at 10.0 A | $V_F$ | 1.1 | V |
| Maximum DC Reverse Current @TA=25 °C<br>at Rated DC Blocking Voltage @TA=125 °C | $I_R$ | 5<br>500 | μA |
| Typical Junction Capacitance（Note1） | $C_j$ | 70 | pF |
| Operating and Storage Temperature Range | $T_j$, $T_{stg}$ | -55 ~ +150 | °C |
| Maximum thermal resistance per leg(Note 2) | $R_{\theta JC}$ | 4.2 | °C/W |

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.
Unit mounted on glass-epoxy substrate with 1oz/ft2_20x20 mm copper pad per pin with heatsink

## RATINGS AND CHARACTERISTICS CURVES (TA = 25 ˚C unless otherwise noted)

**Fig.1 Forward Current Derating Curve**




Current Derating, Case

**Fig.2 Maximum Non-Repetitive Peak Forward Surage Current**

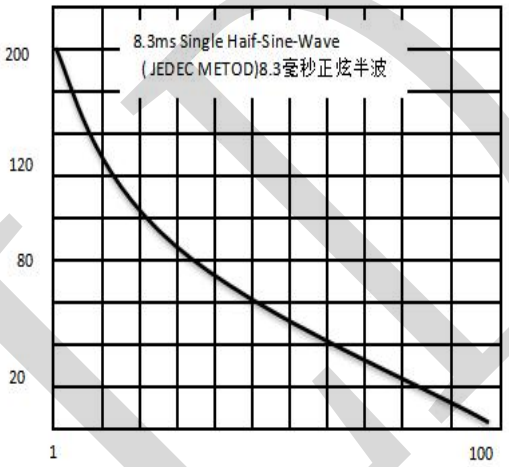



**Fig.3 Typical Reverse Characteristics**

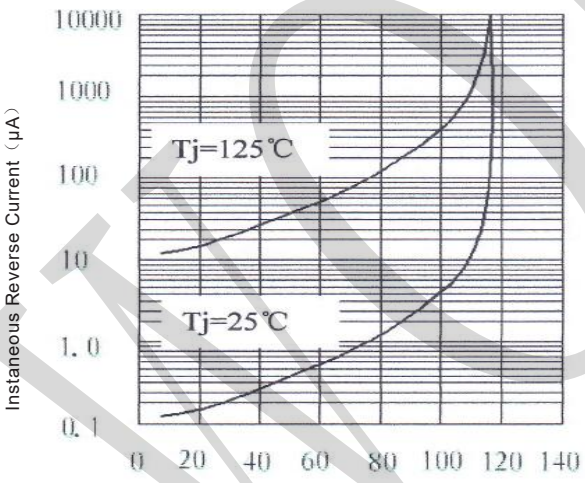
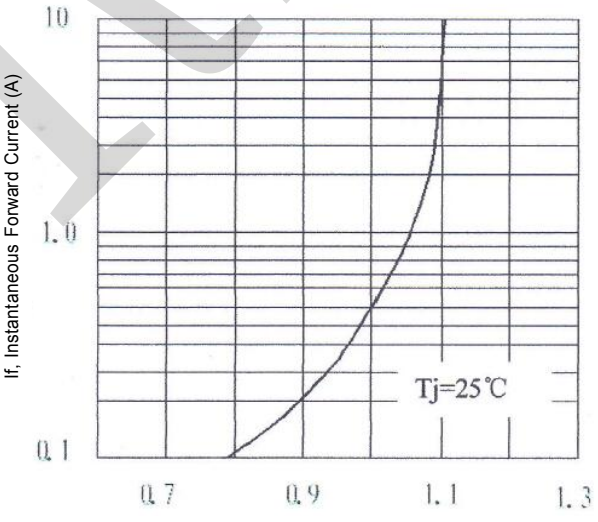
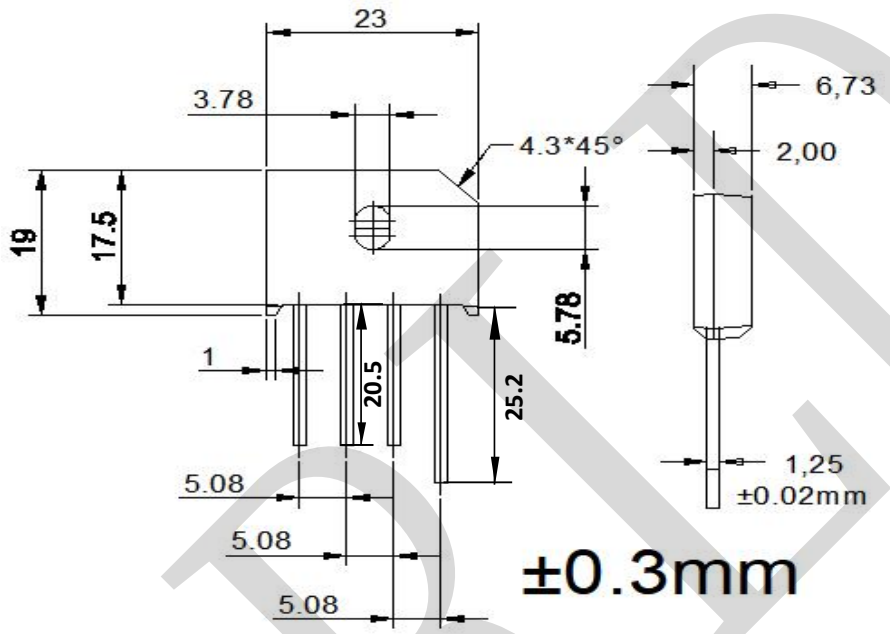



**Fig.4 Typical Instaneous Forward Characteristics**



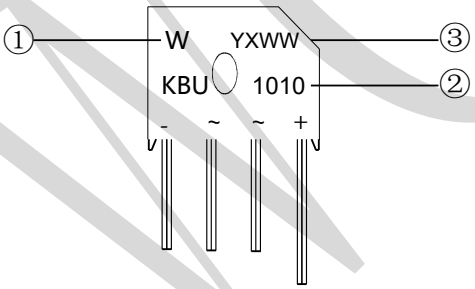
## PACKAGE OUTLINE DIMENSIONS

KBU




Dimensions in millimeters

## Marking Information




①W: Company's trademark

②Product model : KBU1010

③PDC information：

Y X WW H

H:Halogen-free

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)