

CURRENT 10 Ampere  
VOLTAGE RANG 50 to 1000 Volts

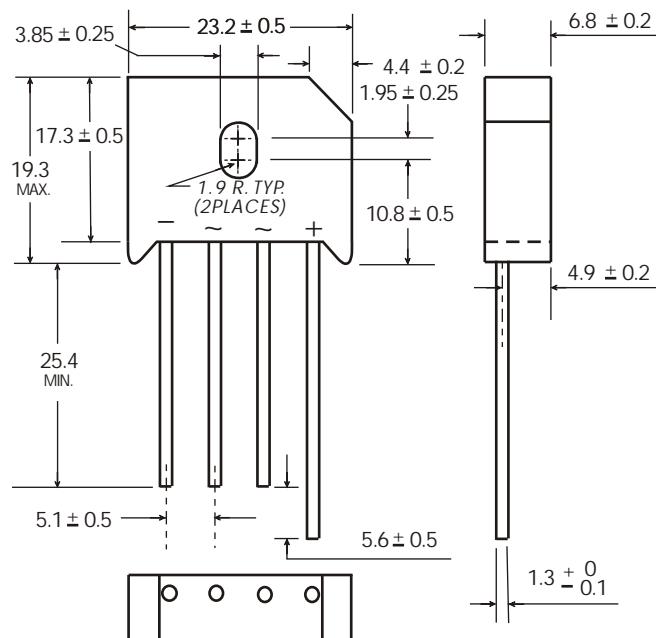
**KBU10005 THRU KBU1010**

## Features

- Ideal for P.C. Board mounting
- High surge current capability
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265°C /10 seconds at 5 lbs (2.3kg) tension

## Mechanical Data

Case: Molded plastic body  
 Terminals: Plated leads solderable per MIL-STD-202,  
 Method 208  
 Polarity: Polarity symbols molded on body  
 Mounting Position:: Any  
 Mounting Torque: 5 in-lbs max.  
 Weight: 0.3 ounce, 8.0 grams (approx)



Dimensions in millimeters(1mm = 0.0394")

## Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
 For Capacitive load derate current by 20%.

| Parameter   | Symbol           | KBU 10005 | KBU 1001 | KBU 1002     | KBU 1004 | KBU 1006 | KBU 1008 | KBU 1010 | unit               |
|---|------------------|-----------|----------|--------------|----------|----------|----------|----------|--------------------|
| Maximum repetitive peak reverse voltage   | VRRM             | 50        | 100      | 200          | 400      | 600      | 800      | 1000     | V                  |
| Maximum RMS bridge input voltage  | VRMS             | 35        | 70       | 140          | 280      | 420      | 560      | 700      | V                  |
| Maximum DC blocking voltage   | VDC              | 50        | 100      | 200          | 400      | 600      | 800      | 1000     | V                  |
| Maximum average forward rectified output current at TA=100°C                          | IF(AV)           |           |          |              | 10       |          |          |          | A                  |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | IFSM             |           |          |              | 300      |          |          |          | A                  |
| Rating for fusing ( t<8.3ms)  | I <sup>2</sup> t |           |          | 300          |          |          |          |          | A <sup>2</sup> sec |
| Typical thermal resistance per element(1)   | ReJA             |           |          | 2.7          |          |          |          |          | °C / W             |
| Operating junction and storage temperature range                                      | TJ, TSTG         |           |          | -55 to + 150 |          |          |          |          | °C                 |

## Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
 For Capacitive load derate by 20 %.

| Parameter  | Symbol | KBU 10005 | KBU 1001 | KBU 1002 | KBU 1004 | KBU 1006 | KBU 1008 | KBU 1010 | Unit |
|--|--------|-----------|----------|----------|----------|----------|----------|----------|------|
| Maximum instantaneous forward voltage drop per leg at 10A                              | VF     |           |          | 1.05     |          |          |          |          | V    |
| Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C | IR     |           |          | 10       |          |          |          |          | μA   |

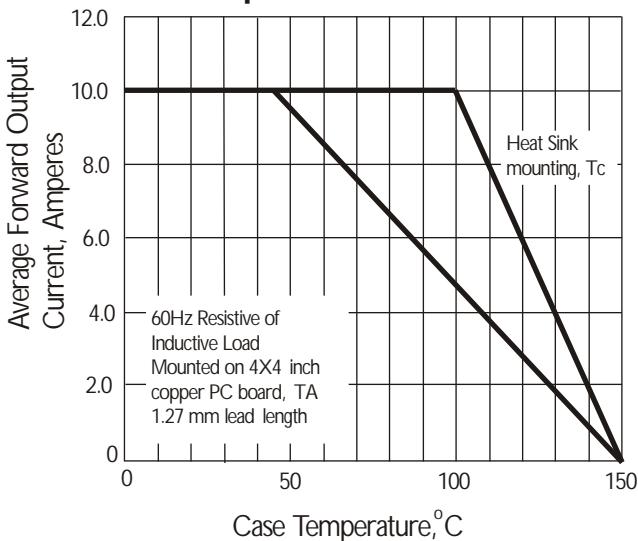
Notes: (1)Thermal resistance from Junction to Ambert on P.C.board mounting.

CURRENT 10 Ampere  
VOLTAGE RANG 50 to 1000 Volts

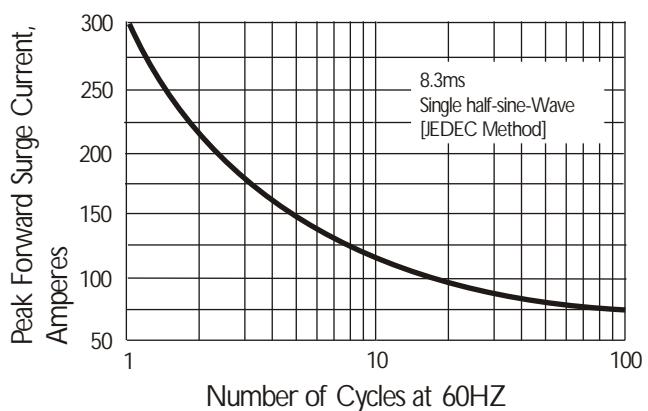
**KBU10005 THRU KBU1010**

RATING AND CHARACTERISTIC CURVES KBU10005 Thru KBU1010

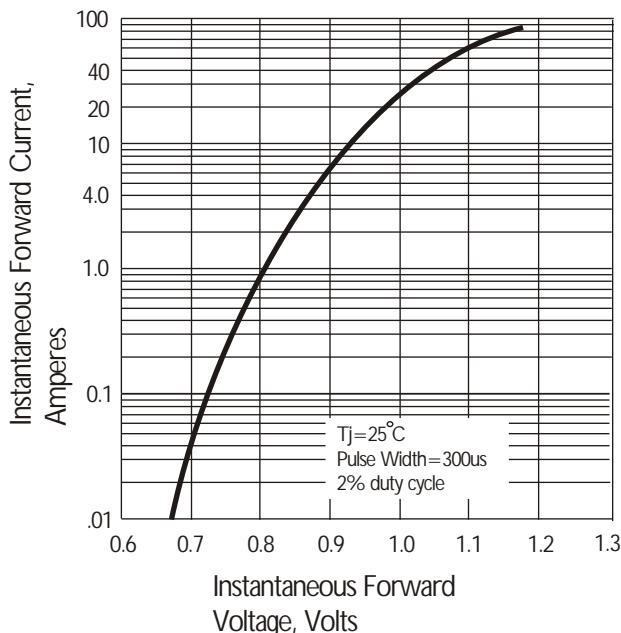
**Fig. 1 Derating Curve for Output Rectified Current**



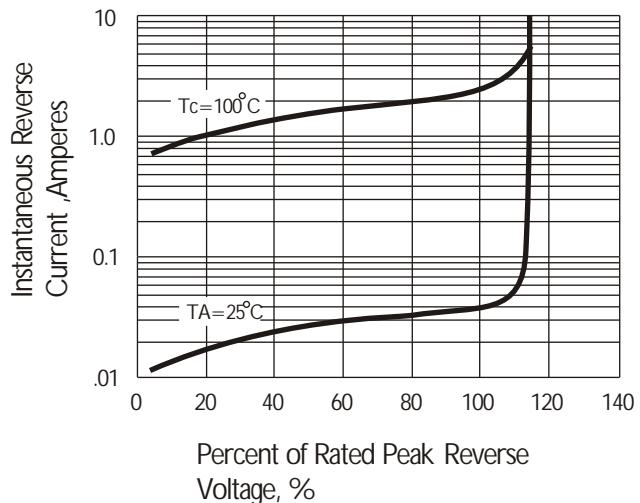
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Reverse Characteristics**



**Fig. 5 Typical Junction Capacitance**

