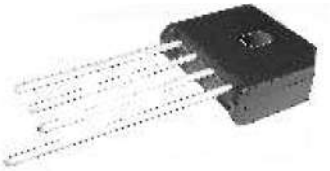
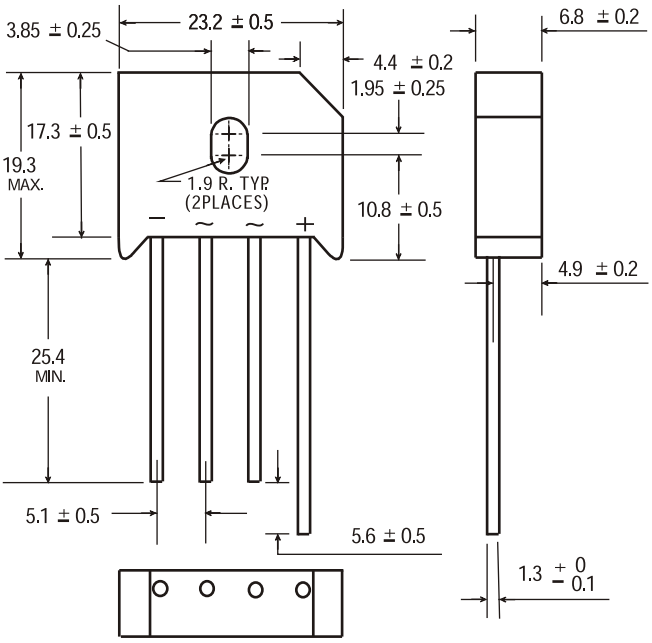
SEP ELECTRONIC CORP.

# KBU25A thru KBU25M

## 25 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V






Dimensions in millimeters(1mm =0.0394″)

## Features

- Ideal for P.C. Board mounting
- High surge current capability
- For purchase please contact ZENIVO, Assistant E-075583681018-engineer
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- High temperature soldering guaranteed 265℃/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)

## 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 25A | KBU 25B | KBU 25D | KBU 25G | KBU 25J | KBU 25K | KBU 25M | 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) | 25 | | | | | | | A |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | IFSM | 350 | | | | | | | A |
| Rating for fusing ( t<8.3ms) | $I^2t$ | 350 | | | | | | | $A^2$sec |
| Typical thermal resistance per element (1) | ReJA | 2.7 | | | | | | | °C / W |
| Operating junction and storage temperature range | TJ, TSTG | -55 to + 150 | | | | | | | ℃ |

## 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 25A | KBU 25B | KBU 25D | KBU 25G | KBU 25J | KBU 25K | KBU 25M | Unit |
|---|---|---|---|---|---|---|---|---|---|
| Maximum instantaneous forward voltage drop per leg at 12.5A | VF | 1.0 | | | | | | | V |
| Maximum DC reverse current at rated TA =25°C<br>DC blocking voltage per element TA =125°C | IR | 10<br>500 | | | | | | | μA |

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

## Rating and Characteristic Curves ( TA=25°C Unless otherwise noted )
## KBU25A thru KBU25M

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

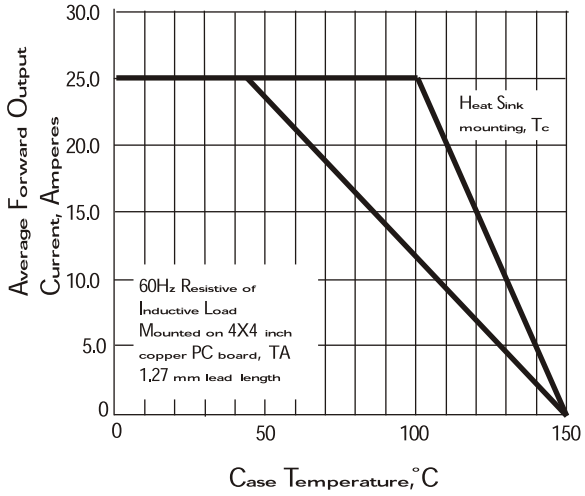



**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**

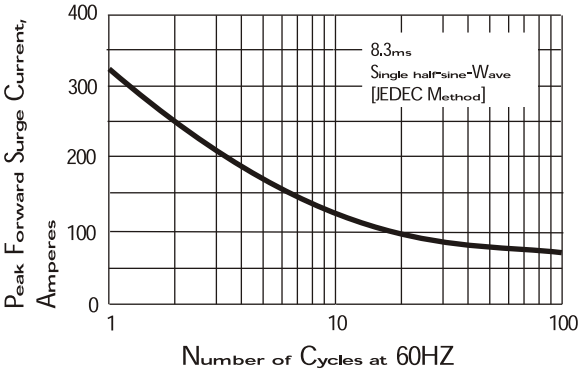



**Fig. 3 Typical Instantaneous Forward Characteristics**

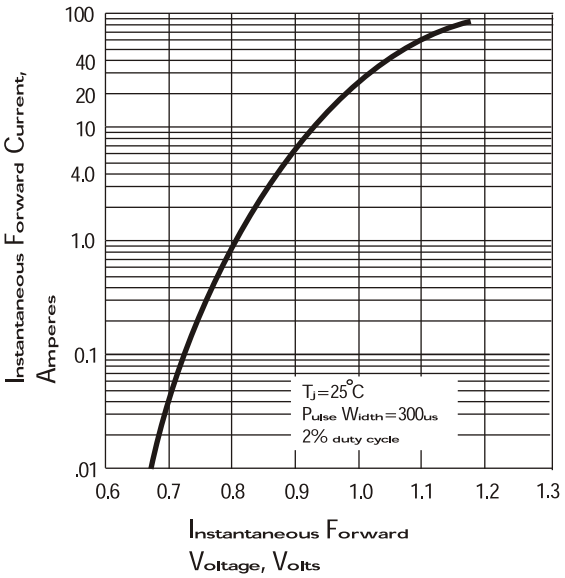



**Fig. 4 Typical Reverse Characteristics**

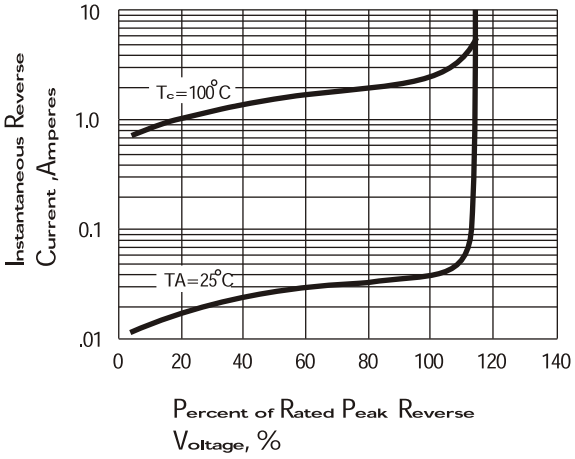



**Fig. 5 Typical Junction Capacitance**