



# America Semiconductor

## Silicon Bridge Rectifier

**KBU6J thru  
KBU6M**

**$V_{RRM} = 50\text{ V} - 1000\text{ V}$**

**$I_F = 6\text{ A}$**

### Features

- Types up to 1000 V  $V_{RRM}$
- Ideal for printed circuit board
- High forward surge current capability
- High temperature soldering guaranteed 250°C/ 10 seconds
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

### Mechanical Data

Case: Molded plastic body

Mounting position: Any

Terminals: Plated leads, solderable per MIL-STD-750, Method 2026

Mounting torque: 5 inch-lbs max

**KBU Package**



### Maximum ratings, at $T_j = 25\text{ °C}$ , unless otherwise specified

| Parameter                                            | Symbol     | Conditions                                   | KBU6J      | KBU6K      | KBU6M      | Unit |
|------------------------------------------------------|------------|----------------------------------------------|------------|------------|------------|------|
| Repetitive peak reverse voltage                      | $V_{RRM}$  |                                              | 600        | 800        | 1000       | V    |
| RMS reverse voltage                                  | $V_{RMS}$  |                                              | 420        | 560        | 700        | V    |
| DC blocking voltage                                  | $V_{DC}$   |                                              | 600        | 800        | 1000       | V    |
| Continuous forward current                           | $I_F$      | $T_C \leq 100\text{ °C}$                     | 6          | 6          | 6          | A    |
| Surge non-repetitive forward current, Half Sine Wave | $I_{F,SM}$ | $T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$ | 250        | 250        | 250        | A    |
| Operating temperature                                | $T_j$      |                                              | -55 to 150 | -55 to 150 | -55 to 150 | °C   |
| Storage temperature                                  | $T_{stg}$  |                                              | -55 to 150 | -55 to 150 | -55 to 150 | °C   |

### Electrical characteristics, at $T_j = 25\text{ °C}$ , unless otherwise specified

| Parameter             | Symbol | Conditions                                                                                | KBU6J     | KBU6K     | KBU6M     | Unit          |
|-----------------------|--------|-------------------------------------------------------------------------------------------|-----------|-----------|-----------|---------------|
| Diode forward voltage | $V_F$  | $I_F = 6\text{ A}$ , $T_j = 25\text{ °C}$                                                 | 1         | 1         | 1         | V             |
| Reverse current       | $I_R$  | $V_R = 50\text{ V}$ , $T_j = 25\text{ °C}$<br>$V_R = 50\text{ V}$ , $T_j = 100\text{ °C}$ | 10<br>500 | 10<br>500 | 10<br>500 | $\mu\text{A}$ |



