

# Silicon Bridge Rectifier

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

$$I_F = 4 \text{ A}$$

## Features

- Types up to 1000 V  $V_{RRM}$
- Ideal for printed circuit board
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique
- Silver plated copper leads

KBL Package

## Mechanical Data

Case: Molded plastic

Weight: 0.167 oz, 5 g

Mounting position: Any

Terminals: Plated leads, solderable per MIL-STD-202F, Method 208

Polarity: Marked on body



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

| Parameter                                            | Symbol     | Conditions                                        | KBL406G    | KBL408G    | KBL410G    | 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                           | $I_F$      | $T_C \leq 50^\circ\text{C}$                       | 4          | 4          | 4          | A                |
| Surge non-repetitive forward current, Half Sine Wave | $I_{F,SM}$ | $T_C = 25^\circ\text{C}$ , $t_p = 8.3 \text{ ms}$ | 150        | 150        | 150        | A                |
| Operating temperature                                | $T_j$      |                                                   | -50 to 150 | -50 to 150 | -50 to 150 | $^\circ\text{C}$ |
| Storage temperature                                  | $T_{stg}$  |                                                   | -50 to 150 | -50 to 150 | -50 to 150 | $^\circ\text{C}$ |

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

| Parameter             | Symbol | Conditions                                       | KBL406G | KBL408G | KBL410G | Unit          |
|-----------------------|--------|--------------------------------------------------|---------|---------|---------|---------------|
| Diode forward voltage | $V_F$  | $I_F = 4 \text{ A}$ , $T_j = 25^\circ\text{C}$   | 1.1     | 1.1     | 1.1     | V             |
| Reverse current       | $I_R$  | $V_R = 50 \text{ V}$ , $T_j = 25^\circ\text{C}$  | 5       | 5       | 5       | $\mu\text{A}$ |
|                       |        | $V_R = 50 \text{ V}$ , $T_j = 125^\circ\text{C}$ | 100     | 100     | 100     |               |

