



Silicon Bridge Rectifier

KBP201 thru KBP204

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

$I_F = 2\text{ A}$

Features

- Types up to 1000 V V_{RRM}
- Ideal for printed circuit board
- Built-in printed circuit board stand-offs
- High temperature soldering guaranteed 265°C/ 10 seconds
- High case dielectric strength
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

KBP Package



Mechanical Data

Case: Reliable low cost construction

Weight: 0.065 oz, 2.2 g

Mounting position: Any

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

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

| Parameter | Symbol | Conditions | KBP201 | KBP202 | KBP203 | KBP204 | Unit |
|--|------------|--|------------|------------|------------|------------|------|
| Repetitive peak reverse voltage | V_{RRM} | | 50 | 100 | 200 | 400 | V |
| RMS reverse voltage | V_{RMS} | | 35 | 70 | 140 | 280 | V |
| DC blocking voltage | V_{DC} | | 50 | 100 | 200 | 400 | V |
| Continuous forward current | I_F | $T_C \leq 50\text{ °C}$ | 2 | 2 | 2 | 2 | A |
| Surge non-repetitive forward current, Half Sine Wave | $I_{F,SM}$ | $T_C = 25\text{ °C}$, $t_p = 8.3\text{ ms}$ | 60 | 60 | 60 | 60 | A |
| Operating temperature | T_j | | -50 to 150 | -50 to 150 | -50 to 150 | -50 to 150 | °C |
| Storage temperature | T_{stg} | | -50 to 150 | -50 to 150 | -50 to 150 | -50 to 150 | °C |

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

| Parameter | Symbol | Conditions | KBP201 | KBP202 | KBP203 | KBP204 | Unit |
|-----------------------|--------|---|--------|--------|--------|--------|---------------|
| Diode forward voltage | V_F | $I_F = 2\text{ A}$, $T_j = 25\text{ °C}$ | 1.1 | 1.1 | 1.1 | 1.1 | V |
| Reverse current | I_R | $V_R = 50\text{ V}$, $T_j = 25\text{ °C}$ | 10 | 10 | 10 | 10 | μA |
| | | $V_R = 50\text{ V}$, $T_j = 100\text{ °C}$ | 200 | 200 | 200 | 200 | |

Thermal characteristics

| | | | | | | | |
|-------------------------------------|------------|--|------|------|------|------|------|
| Thermal resistance, junction - case | R_{thJL} | | 25.0 | 25.0 | 25.0 | 25.0 | °C/W |
|-------------------------------------|------------|--|------|------|------|------|------|



