

## Single Phase Glass Passivated Silicon Bridge Rectifier

$V_{RRM} = 600\text{ V} - 1000\text{ V}$

$I_O = 2\text{ A}$

### Features

- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Built-in printed circuit board stand-offs
- High temperature soldering guaranteed 265°C/ 10 seconds
- High case dielectric strength
- Types from 600 V to 1000 V  $V_{RRM}$
- Not ESD Sensitive

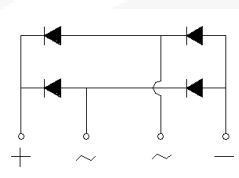
### Mechanical Data

Case: Reliable low cost construction

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

Mounting position: Any

Weight: 0.065 oz, 2.2 grams



KBP Package



### Maximum ratings at $T_a = 25\text{ °C}$ (ambient temperature), unless otherwise specified

| Parameter                       | Symbol    | Conditions | KBP206G    | KBP208G    | KBP210G    | 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    |
| 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 $T_a = 25\text{ °C}$ , unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load

For capacitive load derate current by 20%

| Parameter                                                    | Symbol    | Conditions            | KBP206G | KBP208G | KBP210G | Unit          |
|--------------------------------------------------------------|-----------|-----------------------|---------|---------|---------|---------------|
| Maximum average forward rectified current                    | $I_O$     | $T_a = 50\text{ °C}$  | 2       | 2       | 2       | A             |
| Peak forward surge current                                   | $I_{FSM}$ | single sine-wave      | 60      | 60      | 60      | A             |
| Maximum instantaneous forward voltage per leg                | $V_F$     | $I_F = 2\text{ A}$    | 1.1     | 1.1     | 1.1     | V             |
| Maximum reverse current at rated DC blocking voltage per leg | $I_R$     | $T_a = 25\text{ °C}$  | 10      | 10      | 10      | $\mu\text{A}$ |
|                                                              |           | $T_a = 100\text{ °C}$ | 500     | 500     | 500     |               |

### Thermal characteristics

| Parameter          | Symbol          | Conditions | KBP206G | KBP208G | KBP210G | Unit |
|--------------------|-----------------|------------|---------|---------|---------|------|
| Thermal resistance | $R_{\theta JL}$ |            | 25      | 25      | 25      | °C/W |

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURVE

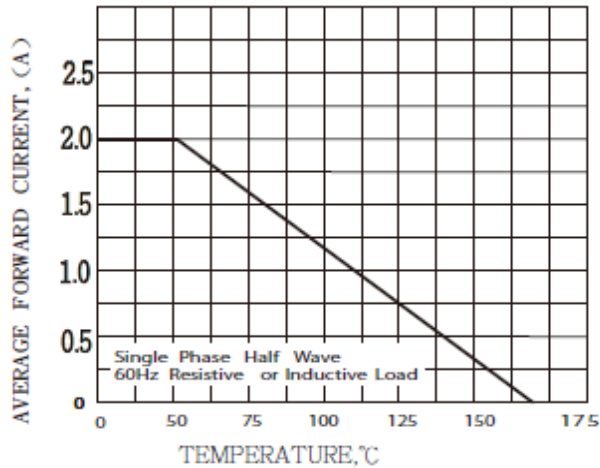


FIG.2-MAXIMUM NON-RECURRENTIVE FORWARD SURGE CURRENT

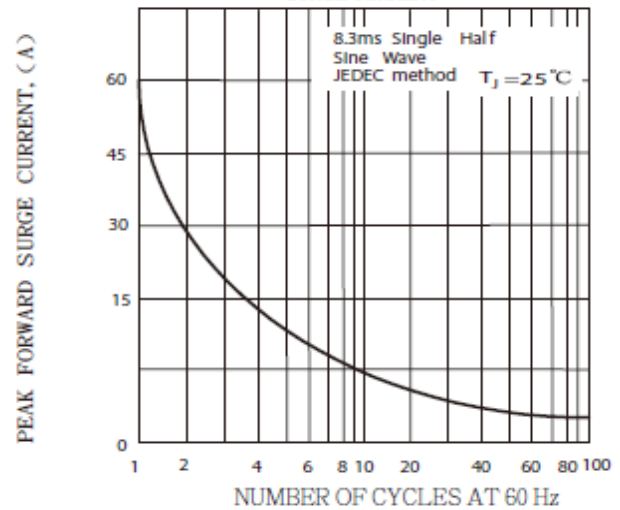


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

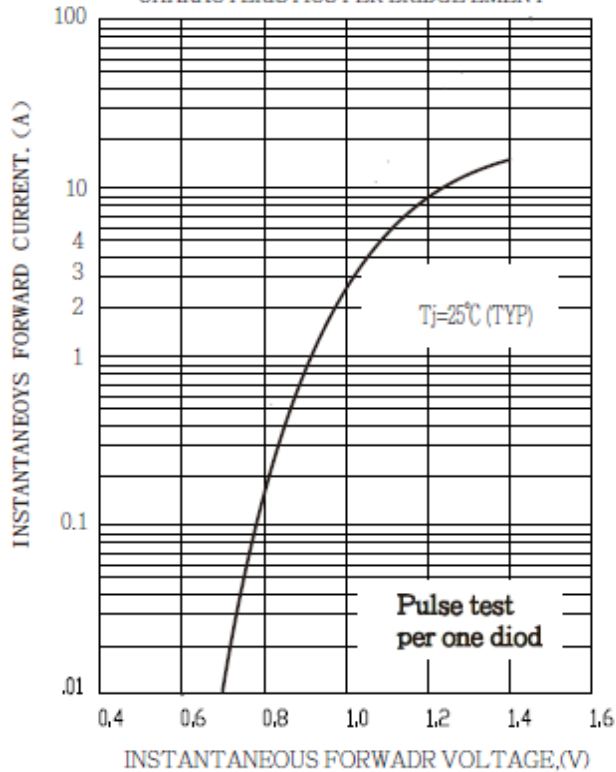
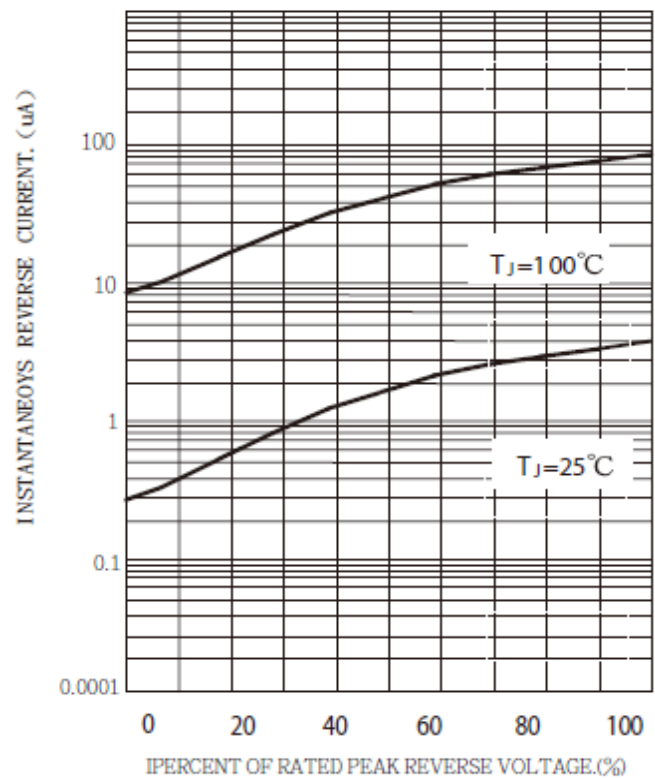
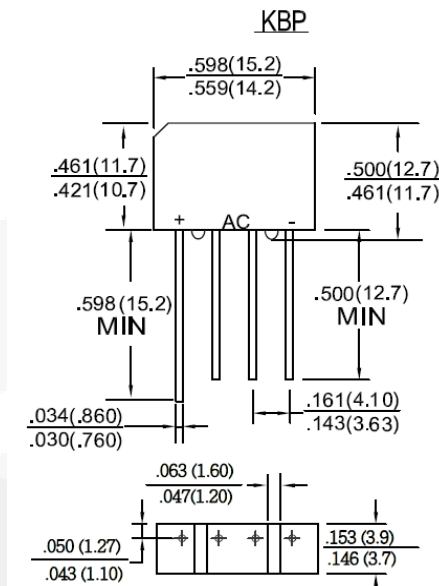


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

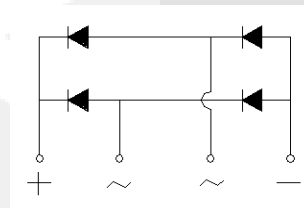


## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



Dimensions in inches and (millimeters)



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