

# UG8KB80

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 800V

Current: 8.0A



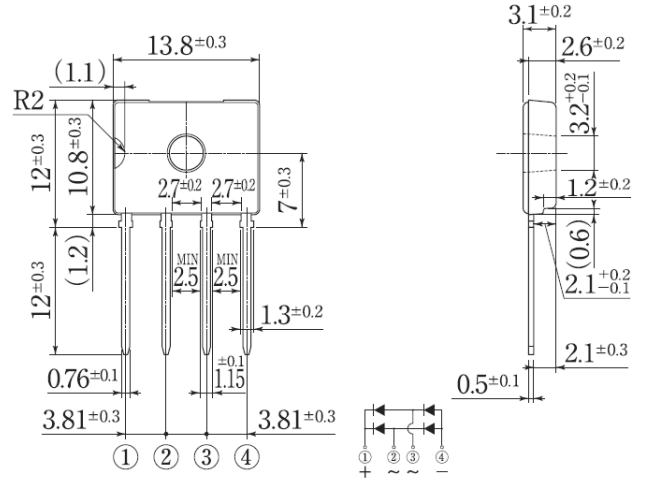
### Features

Glass passivated chip junction  
High case dielectric strength  
High surge current capability  
Ideal for printed circuit board

### Mechanical Data

Terminal: Plated leads solderable per J-STD-002  
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: Polarity symbol marked on body  
Mounting position: any

### D3K



Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

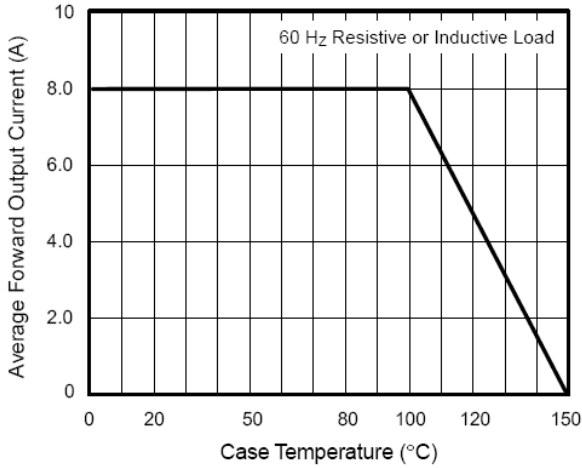
(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

|  | Symbol                            | UG8KB80     | units              |
|--|-----------------------------------|-------------|--------------------|
| Maximum repetitive peak reverse voltage  | V <sub>rrm</sub>                  | 800         | V                  |
| Maximum RMS voltage  | V <sub>rms</sub>                  | 560         | V                  |
| Maximum DC blocking voltage  | V <sub>dc</sub>                   | 800         | V                  |
| Maximum average forward rectified output current<br>T <sub>c</sub> 100°C with heatsink   | I <sub>f(av)</sub>                | 8.0         | A                  |
| Peak forward surge current single sine-wave superimposed<br>on rated load (JEDEC Method) | I <sub>fsm</sub>                  | 165         | A                  |
| Maximum instantaneous forward voltage drop per leg at 4.0A                               | V <sub>f</sub>                    | 1.05        | V                  |
| Rating for fusing (3ms ≤ t < 8.3ms)  | I <sup>2</sup> t                  | 110         | A <sup>2</sup> Sec |
| Maximum DC reverse current at<br>rated DC blocking voltage per leg                       | I <sub>r</sub>                    | 10.0<br>500 | μA                 |
| Thermal resistance<br>with heatsink<br>without heatsink                                  | R <sub>th(jc)</sub>               | 1.5<br>12.0 | °C/W               |
| Operating junction and storage temperature range   | T <sub>j</sub> , T <sub>stg</sub> | -55 to +150 | °C                 |

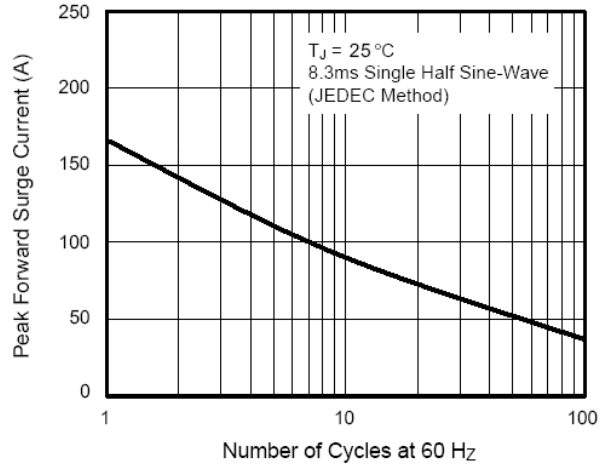
Note:

## RATINGS AND CHARACTERISTIC CURVES UG8KB80

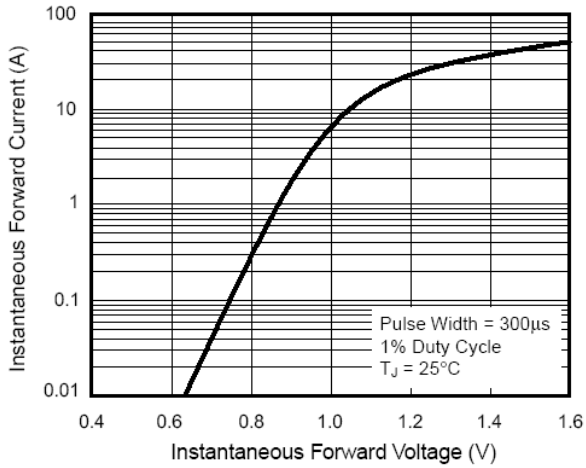
**Fig. 1 – Derating Curve Output Rectified Current**



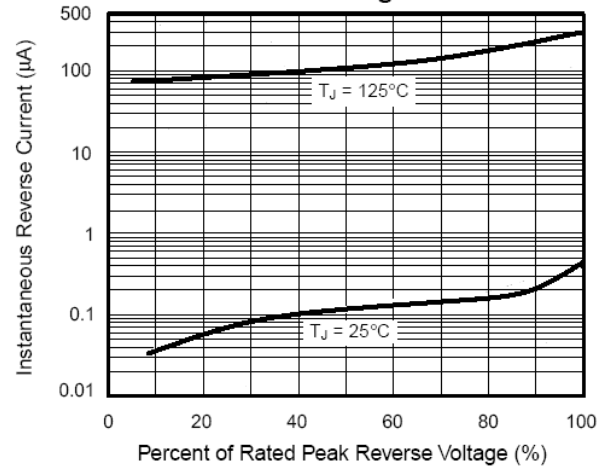
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



**Fig. 3 – Typical Forward Characteristics Per Leg**



**Fig. 4 – Typical Reverse Characteristics Per Leg**



**Fig. 5 – Typical Junction Capacitance Per Leg**

