

# UR2KB60 - UR2KB100

## Single Phase 2.0AMPS. Glass Passivated Bridge Rectifiers

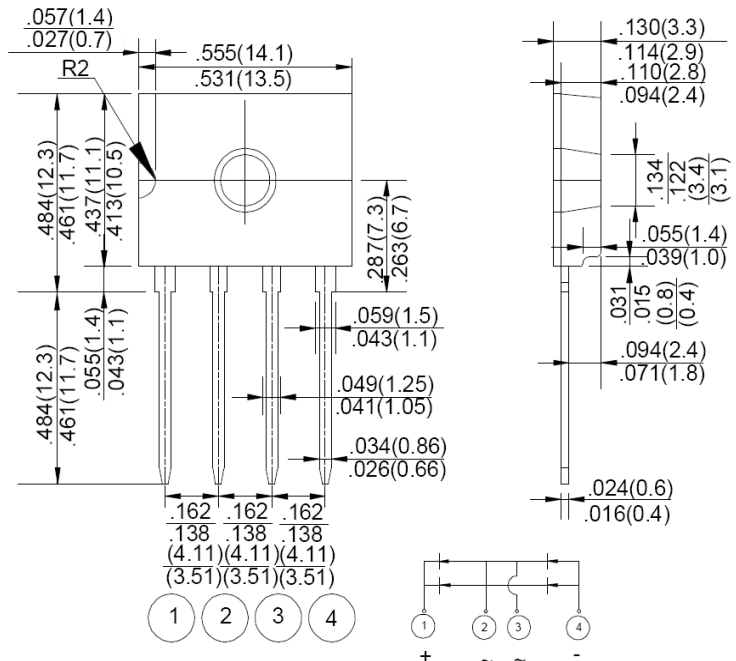
### D3K

### Features

- ✧ UL Recognized File # E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength
- ✧ Plastic material has Underwriters laboratory flammability Classification 94V-0
- ✧ Typical IR less than 0.1uA
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:  
260°C / 10 seconds at 5 lbs., (2.3kg) tension
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

### Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Pure tin plated, lead free, Leads solderable per MIL-STD-202 Method 208
- ✧ Weight: 1.41 grams
- ✧ Mounting Torque : 0.8 N.M max.



### Dimensions in inches and (millimeters)



### Marking Diagram

- UR2KBXX = Specific Device Code  
G = Green Compound  
Y = Year  
WW = Work Week

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

| Type Number                                                                                                                             | Symbol                                                | UR2KB<br>60        | UR2KB<br>80 | UR2KB<br>100 | Units            |
|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--------------------|-------------|--------------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                                                  | $V_{RRM}$                                             | 600                | 800         | 1000         | V                |
| Maximum RMS Voltage                                                                                                                     | $V_{RMS}$                                             | 420                | 560         | 700          | V                |
| Maximum DC Blocking Voltage                                                                                                             | $V_{DC}$                                              | 600                | 800         | 1000         | V                |
| Maximum Average Forward Current Without heat sink $T_A=25^{\circ}C$<br>60Hz sine wave resistance load With heat sink $T_C=143^{\circ}C$ | $I_{F(AV)}$                                           | 1.2<br>2.0         |             |              | A                |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave<br>Superimposed on Rated Load (JEDEC method)                                   | $I_{FSM}$                                             | 62                 |             |              | A                |
| Rating of fusing ( $t < 8.3ms$ )                                                                                                        | $I^2t$                                                | 16                 |             |              | A <sup>2</sup> S |
| Maximum Instantaneous Forward Voltage (Note 1)<br>@ 1 A                                                                                 | $V_F$                                                 | 1.05               |             |              | V                |
| Maximum DC Reverse Current at Rated DC Block Voltage                                                                                    | $I_R$                                                 | 10                 |             |              | uA               |
| Dielectric Strength (Terminal to Case, AC 1minute)                                                                                      | $V_{dis}$                                             | 2                  |             |              | KV               |
| Typical Thermal Resistance                                                                                                              | $R_{\theta JA}$<br>$R_{\theta JC}$<br>$R_{\theta JL}$ | 13.4<br>2.3<br>2.8 |             |              | °C/W             |
| Operating Temperature Range                                                                                                             | $T_J$                                                 | - 55 to + 150      |             |              | °C               |
| Storage Temperature Range                                                                                                               | $T_{STG}$                                             | - 55 to + 150      |             |              | °C               |

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

## RATINGS AND CHARACTERISTIC CURVES (UR2KB60 THRU UR2KB100)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

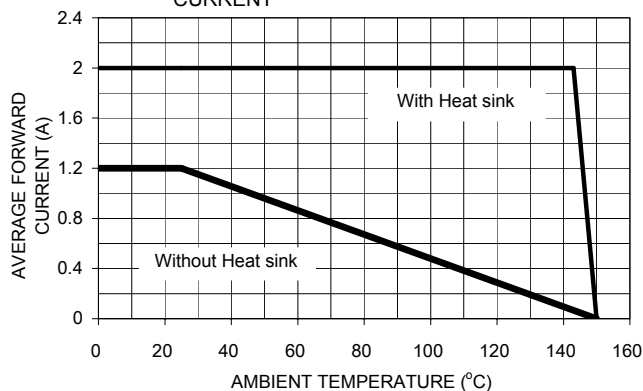


FIG.2 MAXIMUM FORWARD SURGE CURRENT PER LEG

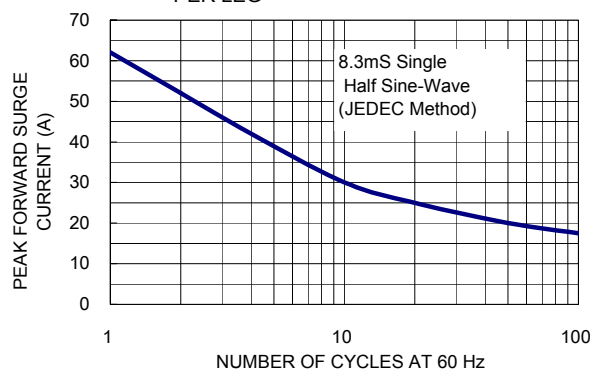


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

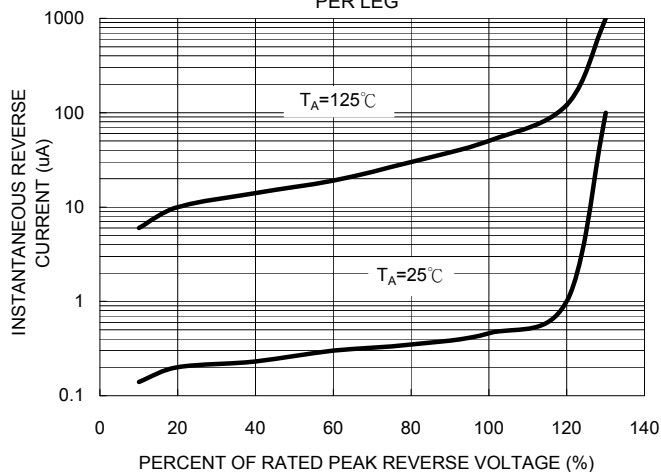


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG.

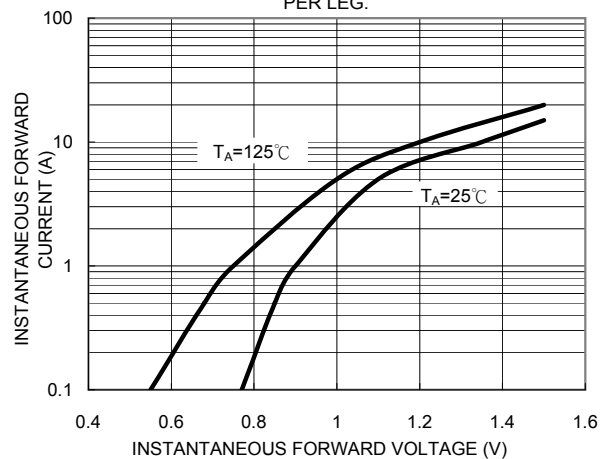


FIG. 5 FORWARD POWER DISSIPATION

