

## 2.0A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

Forward Current – 2.0A

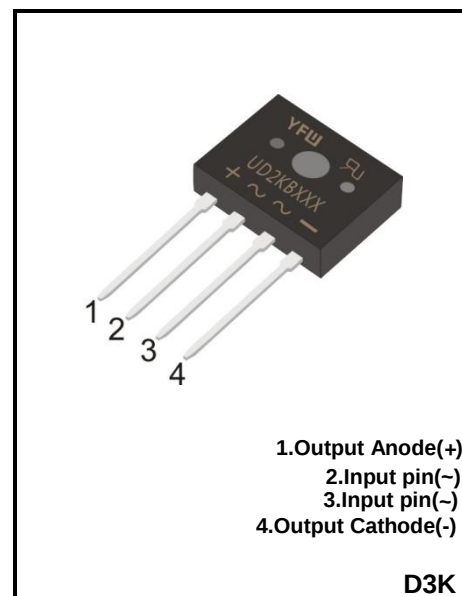
### FEATURES

- ◆High current capability
- ◆Low forward voltage drop
- ◆Glass Passivated Chip Junction
- ◆Low power loss, high efficiency
- ◆Lead free in comply with EU RoHS 2011/65/EU directives



### MECHANICAL DATA

- ◆Case: D3K
- ◆Terminals: Solderable per MIL-STD-202E, Method 208C
- ◆Case:UL-94 Class V-0 recognized Flame Retardant Epoxy



### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

| Parameter                                                                                             | Symbols                                               | UD2KB10         | UD2KB20 | UD2KB40 | UD2KB60 | UD2KB80 | UD2KB100 | Units            |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------|---------|---------|---------|---------|----------|------------------|
| Maximum Repetitive Peak Reverse Voltage                                                               | $V_{RRM}$                                             | 100             | 200     | 400     | 600     | 800     | 1000     | V                |
| Maximum RMS voltage                                                                                   | $V_{RMS}$                                             | 70              | 140     | 280     | 420     | 560     | 700      | V                |
| Maximum DC Blocking Voltage                                                                           | $V_{DC}$                                              | 100             | 200     | 400     | 600     | 800     | 1000     | V                |
| Average Rectified Output Current                                                                      | $I_{(AV)}$                                            | 2               |         |         |         |         |          | A                |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)     | $I_{FSM}$                                             | 60              |         |         |         |         |          | A                |
| Forward Voltage per element @ $I_F = 2A$ DC                                                           | $V_F$                                                 | 1.1             |         |         |         |         |          | V                |
| Maximum DC Reverse Current @ $T_a = 25^\circ C$<br>at Rated DC Blocking Voltage @ $T_a = 125^\circ C$ | $I_R$                                                 | 10<br>500       |         |         |         |         |          | $\mu A$          |
| I2t Rating for Fusing( $3ms \leq t \leq 8.3ms$ )                                                      | $I^2t$                                                | 14.94           |         |         |         |         |          | A <sup>2</sup> S |
| Maximum Typical Thermal Resistance<br>wwithout heatsink<br>wwith heatsink<br>wwithout heatsink        | $R_{\theta JA}$<br>$R_{\theta JC}$<br>$R_{\theta JL}$ | 55<br>1.5<br>15 |         |         |         |         |          | $^\circ C/W$     |
| Operating and Storage Temperature Range                                                               | $T_j, T_{stg}$                                        | -55 ~ +150      |         |         |         |         |          | $^\circ C$       |

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Device mounted on 50mm\*50mm\*1.6mm Cu plate heatsink.

FIG.1-DERATING CURVE OUTPUT  
RECTIFIED CURRENT

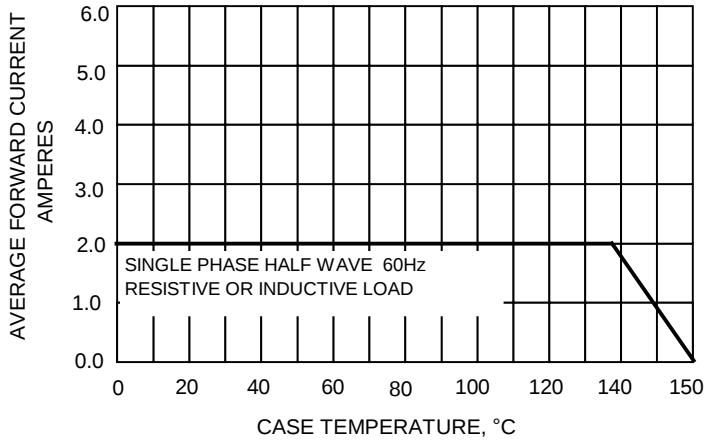


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

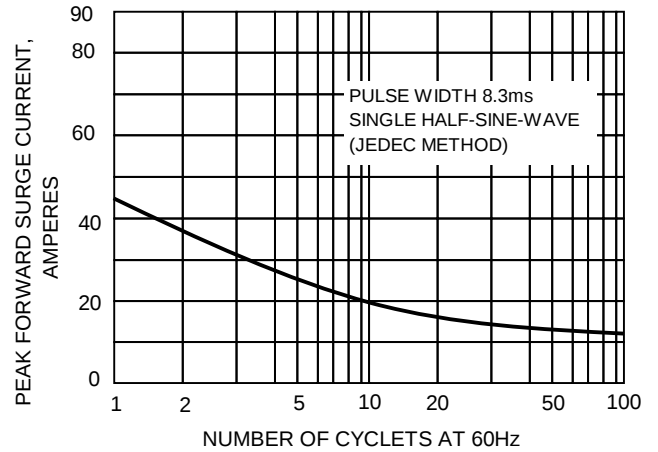


FIG.3-TYPICAL FORWARD CHARACTERISTICS

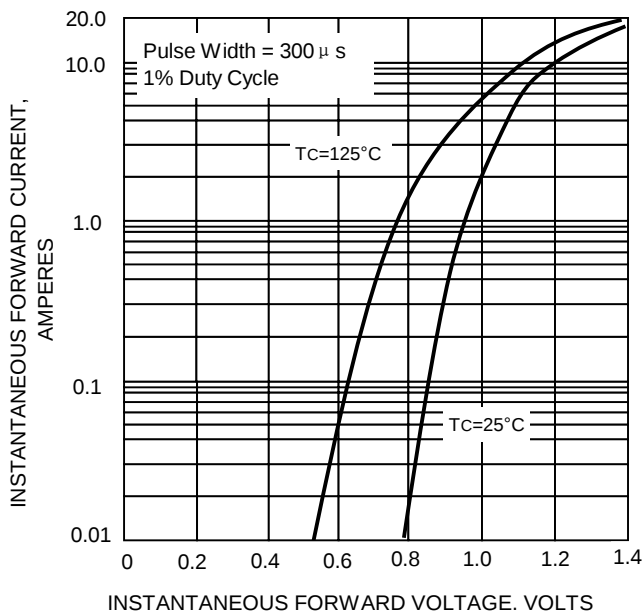
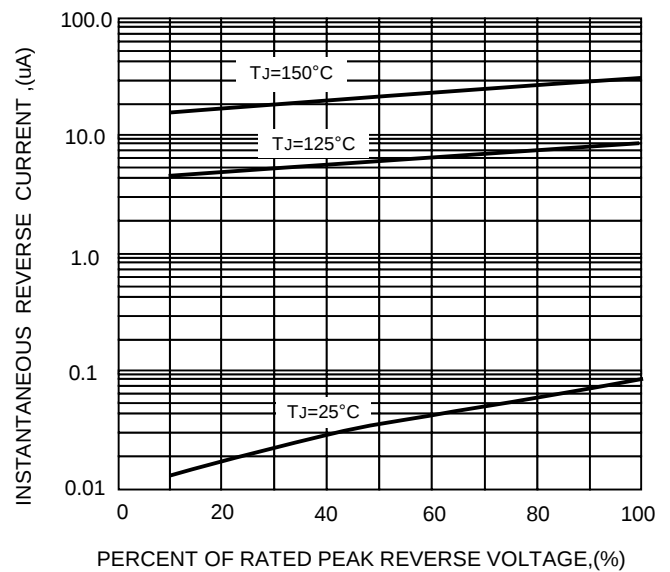
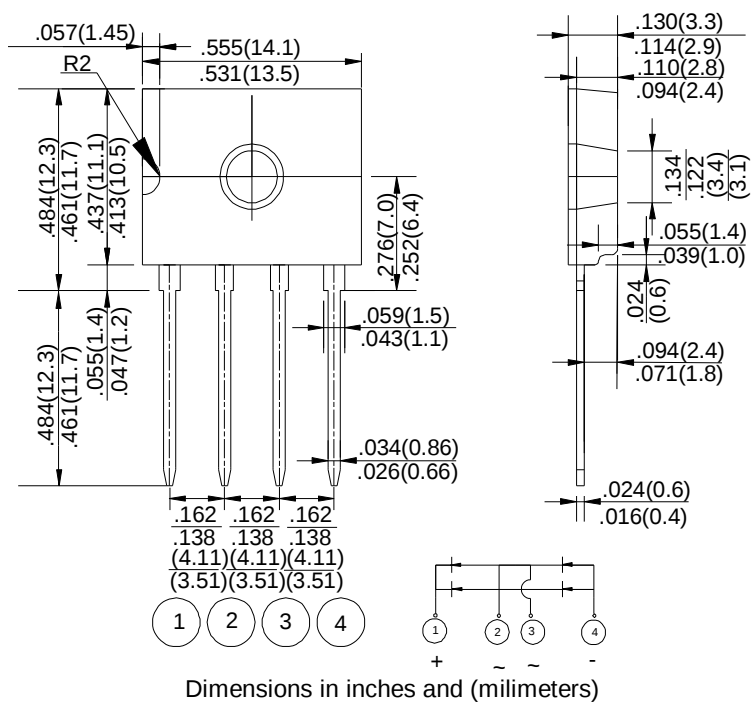


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Package Outline

D3K



Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| D3K     | BOX                 | 500              | EIA-481-1         |