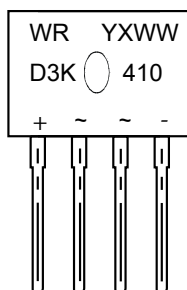


## Ultrasoft Recovery Bridge



### PINNING

| PIN | DESCRIPTION        |
|-----|--------------------|
| 1   | Input Pin (~)      |
| 2   | Input Pin (~)      |
| 3   | Output Anode (+)   |
| 4   | Output Cathode (-) |

### Features

- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 4 A
- High Surge Current Capability
- Designed For Surface Mount Application

### Benefits

- Case: D3K
- Terminals: Solderable Per MIL-STD-750

### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

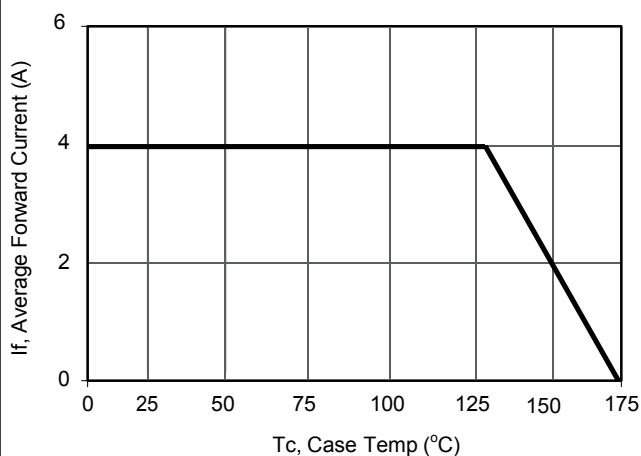
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter                                                                                               | Symbols          | WRD3K410   | Units            |
|---------------------------------------------------------------------------------------------------------|------------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage                                                                 | VRRM             | 1000       | V                |
| Maximum RMS voltage                                                                                     | VRMS             | 700        | V                |
| Maximum DC Blocking Voltage                                                                             | VDC              | 1000       | V                |
| Average Rectified Output Current                                                                        | Io               | 4.0        | A                |
| Reverse Recovery Time.<br>IF=0.5A,IR=1A,IRR=0.25A                                                       | Trr              | 10         | us               |
| Peak Forward Surge Current 8.3 ms Single<br>Half Sine Wave Superimposed on Rated<br>Load (JEDEC Method) | IFSM             | 120        | A                |
| I <sup>2</sup> t rating for fusing ( 1ms< t < 10ms)                                                     | I <sup>2</sup> t | 93         | A <sup>2</sup> S |
| Maximum Forward Voltage at 2.0 A                                                                        | VF               | 1.0        | V                |
| Maximum DC Reverse Current @TA=25 °C<br>at Rated DC Blocking Voltage @TA=125 °C                         | IR               | 5<br>100   | μA               |
| Typical Junction Capacitance (Note1)                                                                    | Cj               | 50         | pF               |
| Operating and Storage Temperature Range                                                                 | Tj, Tstg         | -55 ~ +150 | °C               |

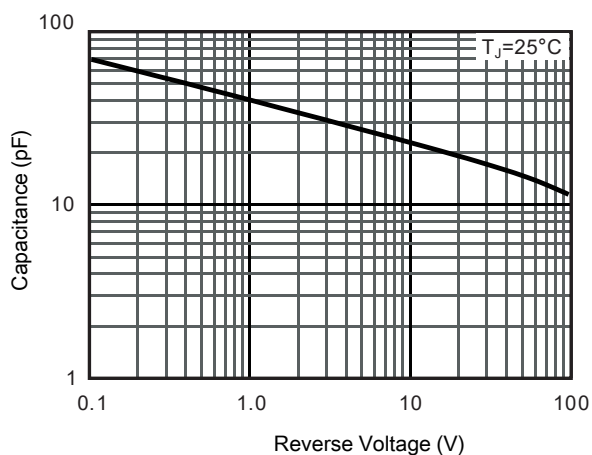
Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

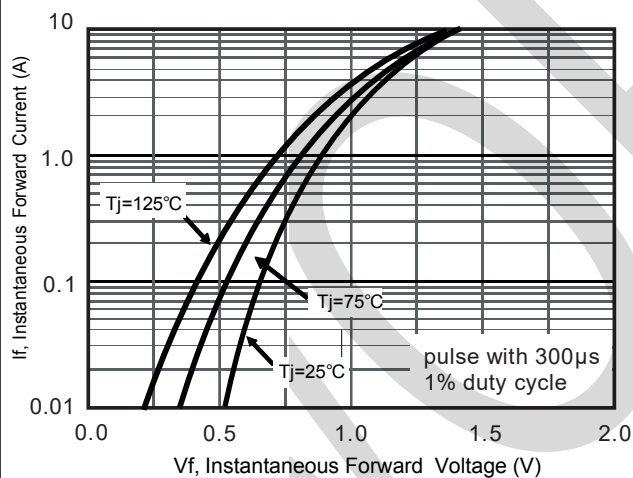
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



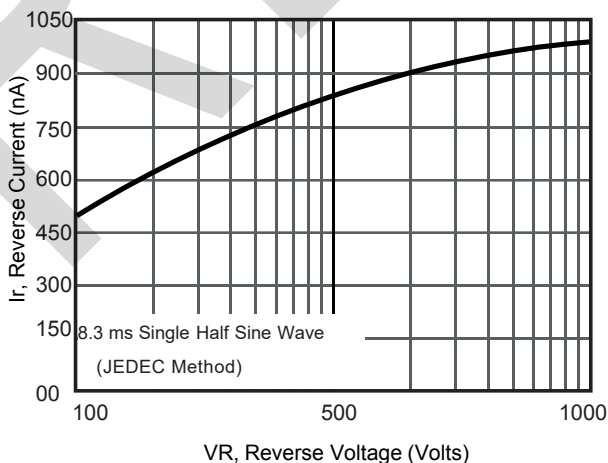
Current Derating, Case



Typical Junction Capacitance



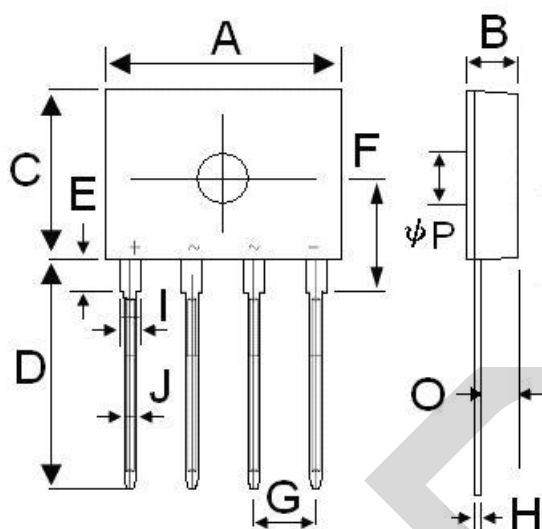
Typical Forward Voltage



Typical Reverse Current

## PACKAGE OUTLINE DIMENSIONS

### D3K



| D3K                          |      |      |
|------------------------------|------|------|
| Dim.                         | Min. | Max. |
| A                            | 14.2 | 14.7 |
| B                            | 3.30 | 3.60 |
| C                            | 10.2 | 10.6 |
| D                            | 13.8 | 14.4 |
| E                            | 1.8  | 2.2  |
| F                            | 6.65 | 7.25 |
| G                            | 3.71 | 3.91 |
| H                            | 0.3  | 0.55 |
| I                            | 1.22 | 1.42 |
| J                            | 0.76 | 0.86 |
| O                            | 1.8  | 2.4  |
| P                            | 3.0Φ | 3.4Φ |
| All Dimensions in millimeter |      |      |

