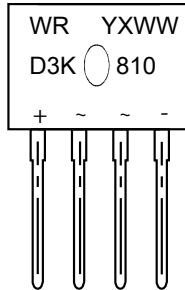


## Ultrasoft Recovery Bridge



### 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 - 8.0 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.

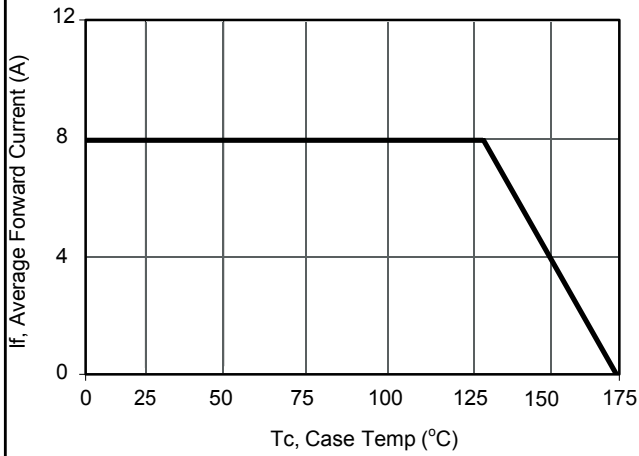
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	WRD3K810	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	$I_o$	8.0	A
Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$	$T_{rr}$	10	us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	180	A
$I^2 t$ rating for fusing ( 1ms < $t$ < 10ms)	$I^2 t$	93	A <sup>2</sup> S
Maximum Forward Voltage at 4.0 A	$V_F$	1.0	V
Maximum DC Reverse Current @ $T_A=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^\circ\text{C}$	$I_R$	5 100	$\mu\text{A}$
Typical Junction Capacitance (Note1)	$C_j$	50	pF
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +175	$^\circ\text{C}$

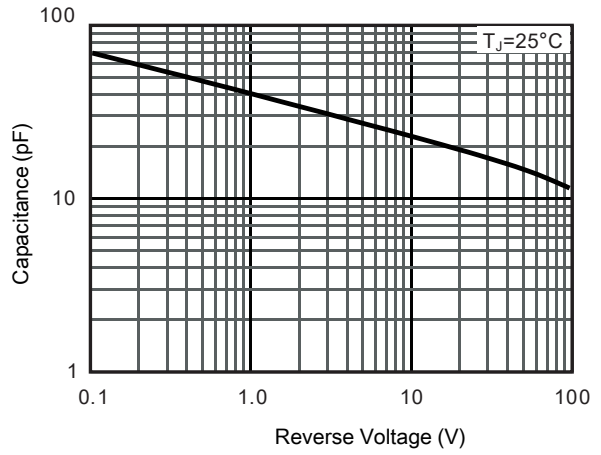
Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

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

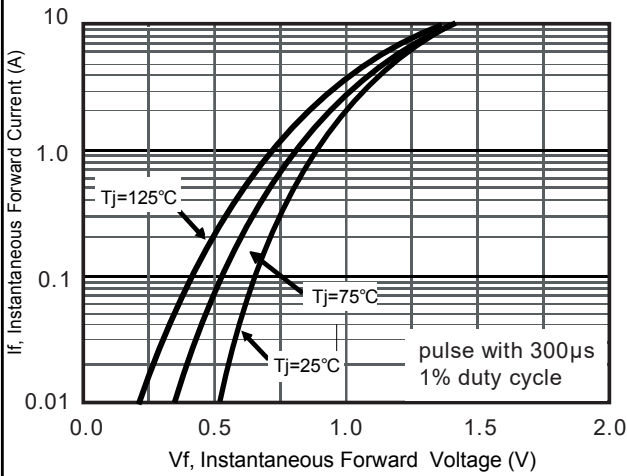
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



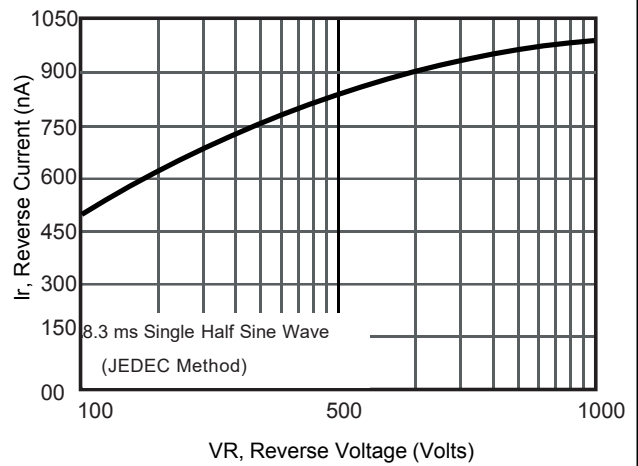
Current Derating, Case



Typical Junction Capacitance



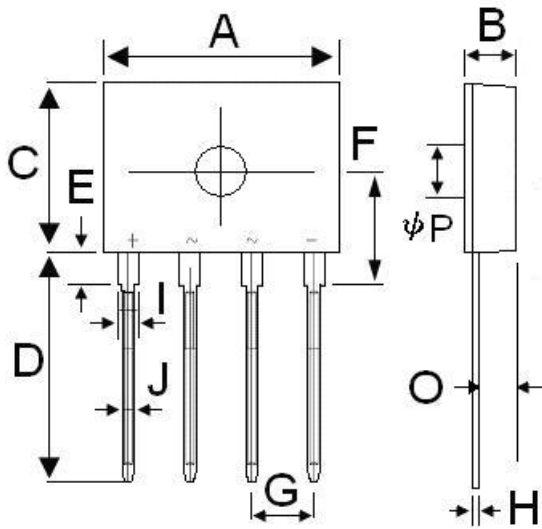
Typical Forward Voltage



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		

