

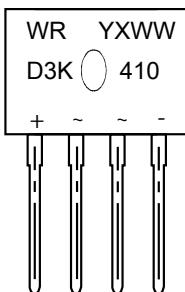
World  
International  
(China) Limited

Soft-Bridge®

WRD3K410

23-Apr-2020

## 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

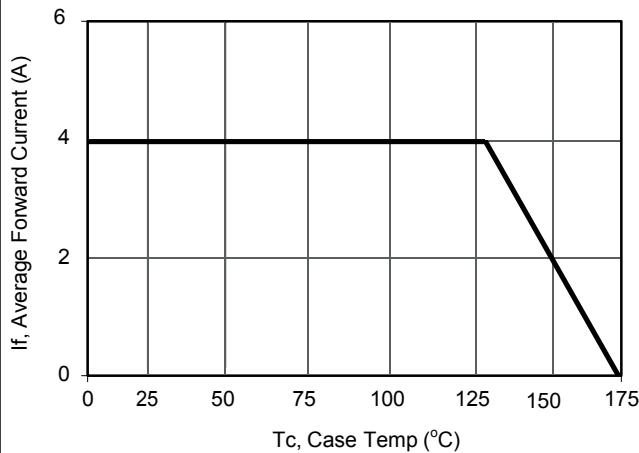
### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

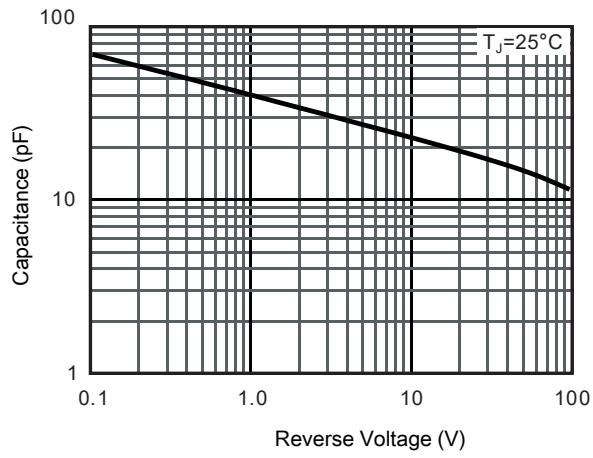
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

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. IF=0.5A,IR=1A,IRR=0.25A	TrR	10	us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	180	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 at Rated DC Blocking Voltage @TA=125 °C	IR	5 100	μA
Typical Junction Capacitance (Note1)	C <sub>j</sub>	50	pF
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 ~ +175	°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.			

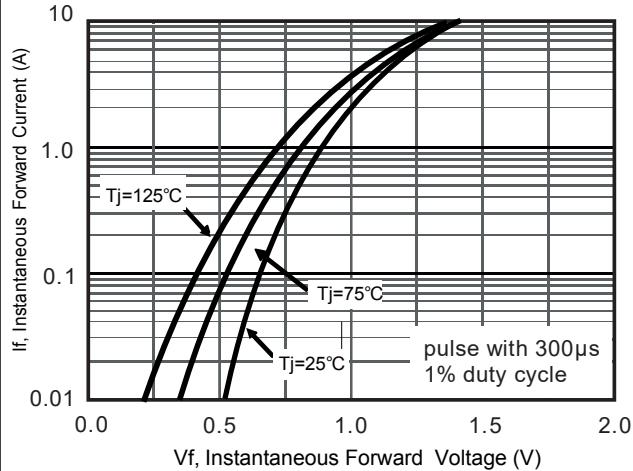
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



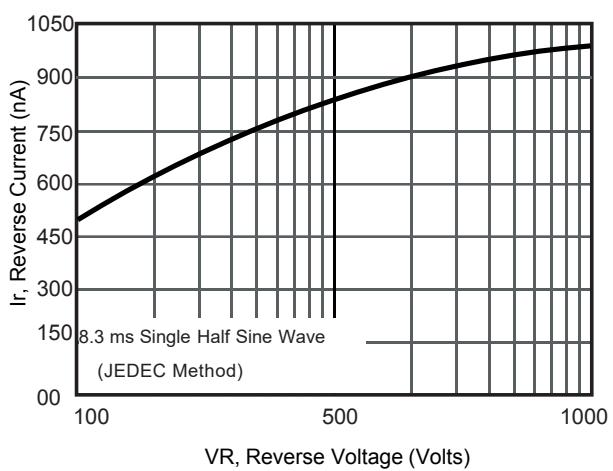
Current Derating, Case



Typical Junction Capacitance



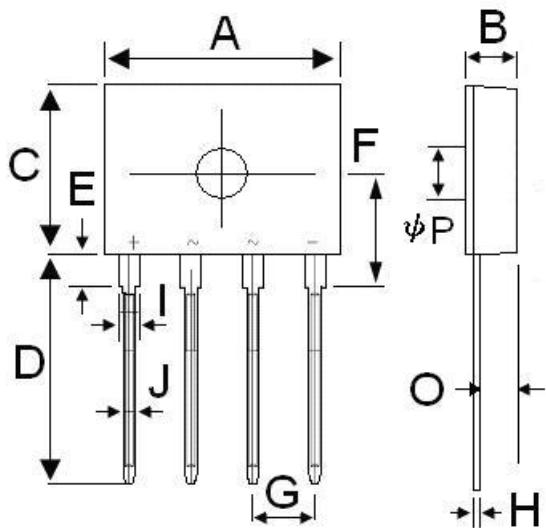
Typical Forward Voltage



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

