Shenzhen World Industrial Co.,Ltd.

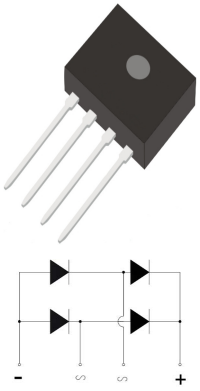
WRD3K810

01-Jul-2026

Ultrasoft Recovery Bridge

VF:0.74V@1A/125°C

D3K



Features

- Reverse Voltage - 1000 V
- Iorward Current - 8.0 A
- Compliant with RoHS Provisions
- High forward surge current capability

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

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	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current	I_o	8.0	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)	I_{FSM}	180	A
I^2t rating for fusing (8.3ms)	I^2t	134	A^2S
Maximum Forward Voltage at 4.0 A	V_F	1.1	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I_R	10 500	μA
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C
Typical thermal resistance (Note 1)	$R_{\theta JC}$	3.0	°C/W
	$R_{\theta JA}$	22	
Note: 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.			

Ratings And Characteristics Curves (TA = 25 ˚C unless otherwise noted)

Fig.1 Current Derating, Case

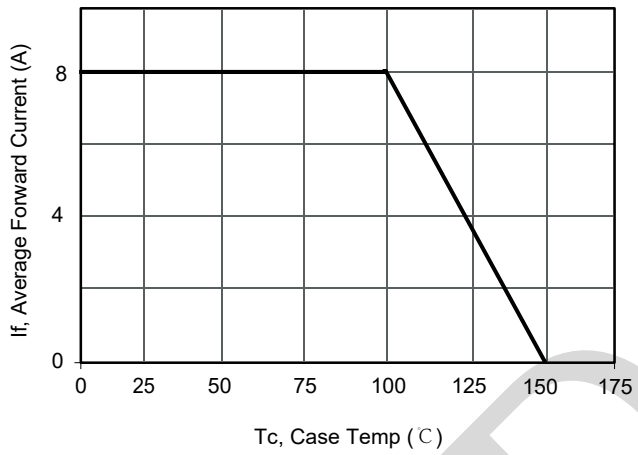


Fig.2 Maximum Non-Repetitive Peak Forward Surage Current

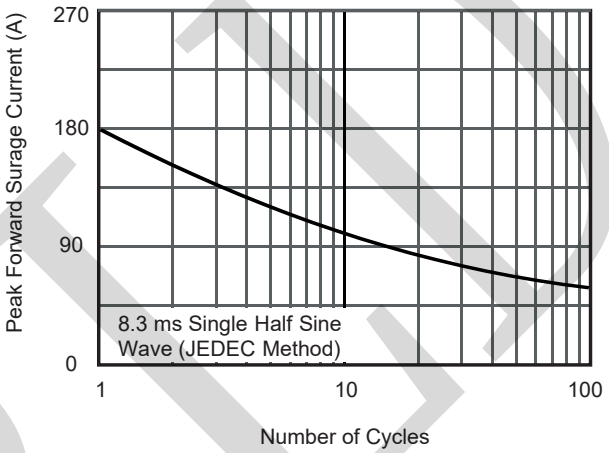


Fig.3 Typical Forward Voltage

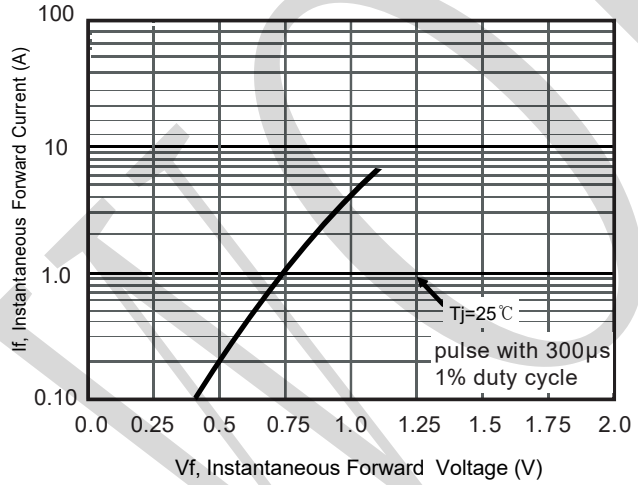
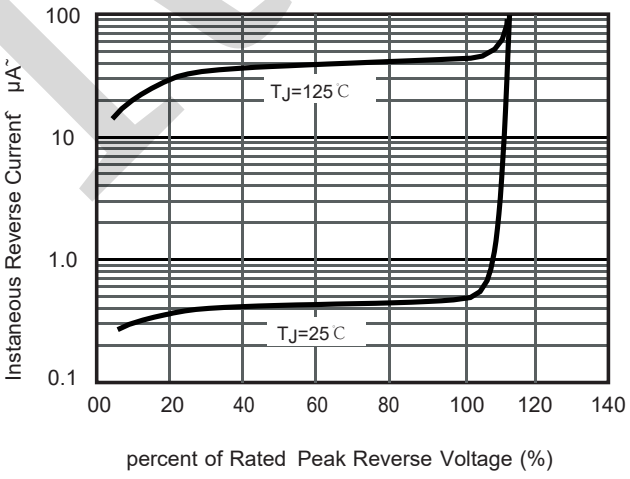
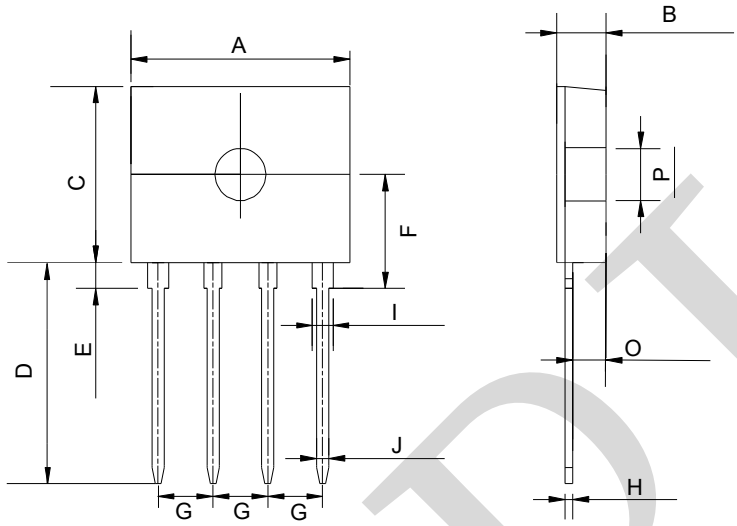


Fig.4 Typical Reverse Characteristics



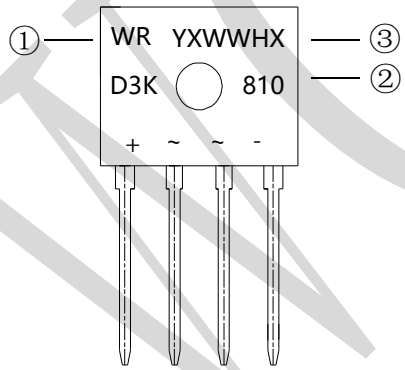
Package Outline Dimensions

Note:unit In(mm)



D3K		
Dim	Min	Max
A	14.20	14.70
B	3.30	3.60
C	10.20	10.60
D	13.8	14.4
E	1.80	2.40
F	6.60	7.30
G	3.60	4.00
H	0.25	0.60
I	1.10	1.30
J	0.60	0.90
O	1.60	2.40
P	3.00	3.50

Marking Information



①WR: Company's trademark

②Product model : D3K810

③PDC information：

Y X WW H X

- M:Internal identification code 2
- H:Halogen-free
- WW:Week code(01 to 53)
- X:Internal identification code 1
- Y:Year code(ex:0=2020)

Revision Histor			
Date	Revision	Description & changes	Author
2017.11.23	1.0	Initial version	Sun
2020.04.28	1.1	Add printed characters	Sun
2026.07.01	1.2	Version updating	Tang

WORLD