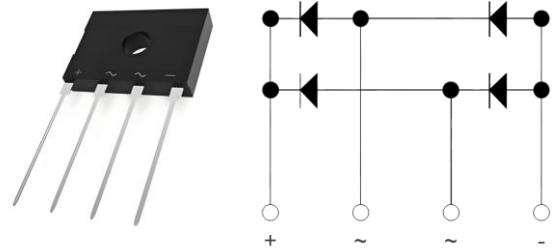


### Features

- ◆ Glass Passivated Chip
- ◆ High Surge Current Capability
- ◆ Low Reverse Leakage Current
- ◆ Case to Terminal Isolation Voltage 2500V

### Application

- ◆ LED Lighting
- ◆ Switch Mode Power Supply
- ◆ Household Electrical Appliances
- ◆ General Purpose Single-Phase Bridge Rectifier



### Machanical Data

- ◆ Case: Plastic Package
- ◆ Marking / Polarity: Marked on Body
- ◆ Weight: About 1.2 Grams

### Maximum Ratings and Thermal Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter		Rating	Unit
$V_{RRM}$	Recurrent Peak Reverse Voltage		1000	V
$I_{F(AV)}$	Average Forward Output Rectified Current, $T_A = 120^\circ\text{C}$		4.0	A
$V_F$	Maximum Forward Voltage Per Leg, $I_{FM} = 4.0\text{A}$		0.98	V
$I_{FSM}$	Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load		125	A
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5.0	$\mu\text{A}$
		$T_A = 125^\circ\text{C}$	500	
$i^2t$	Rating for Fusing ( $t < 8.3\text{ms}$ )		64	$\text{A}^2\text{S}$
$V_{isol}$	Rms Isolation Voltage from Case to Leads		2500	V
$C_J$	Typical Junction Capacitance		38	pF
$R_{\theta JC}$	Maximum Thermal Resistance Per Leg		4.2	$^\circ\text{C/W}$
$T_J, T_{STG}$	Operating Junction and Storage Temperature Range		-55 to 150	$^\circ\text{C}$

#### Notes:

- a. Junction to case with heatsink.
- b. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw.

### ■ Characteristic Curve

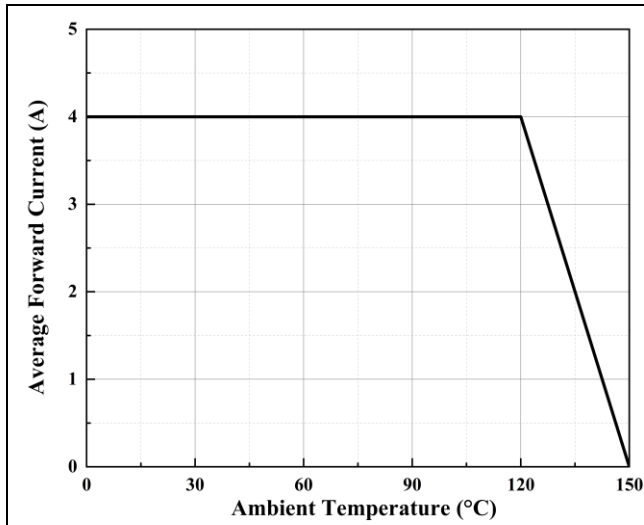


Figure 1. Forward Current Derating Curve

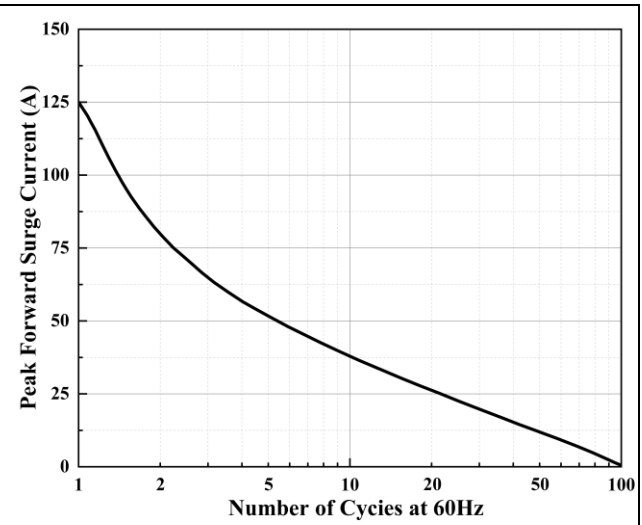


Figure 2. Maximum Non-Repetitive Surge Current

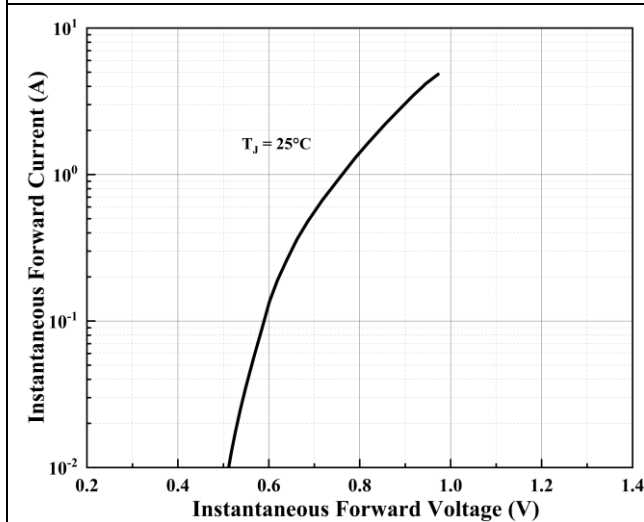


Figure 3. Typical Forward Characteristics Per Diode

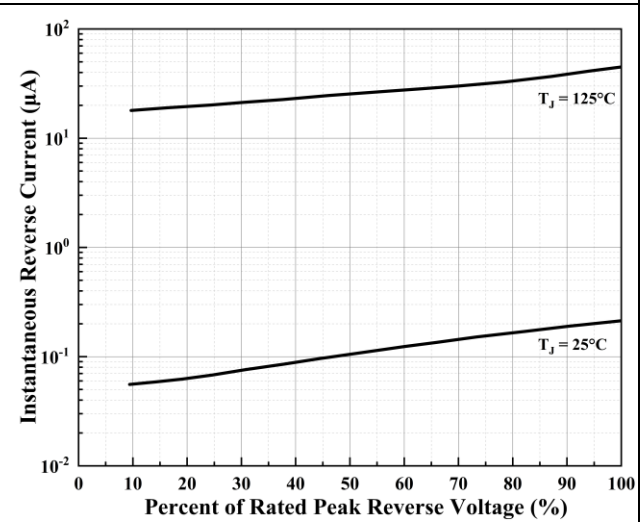
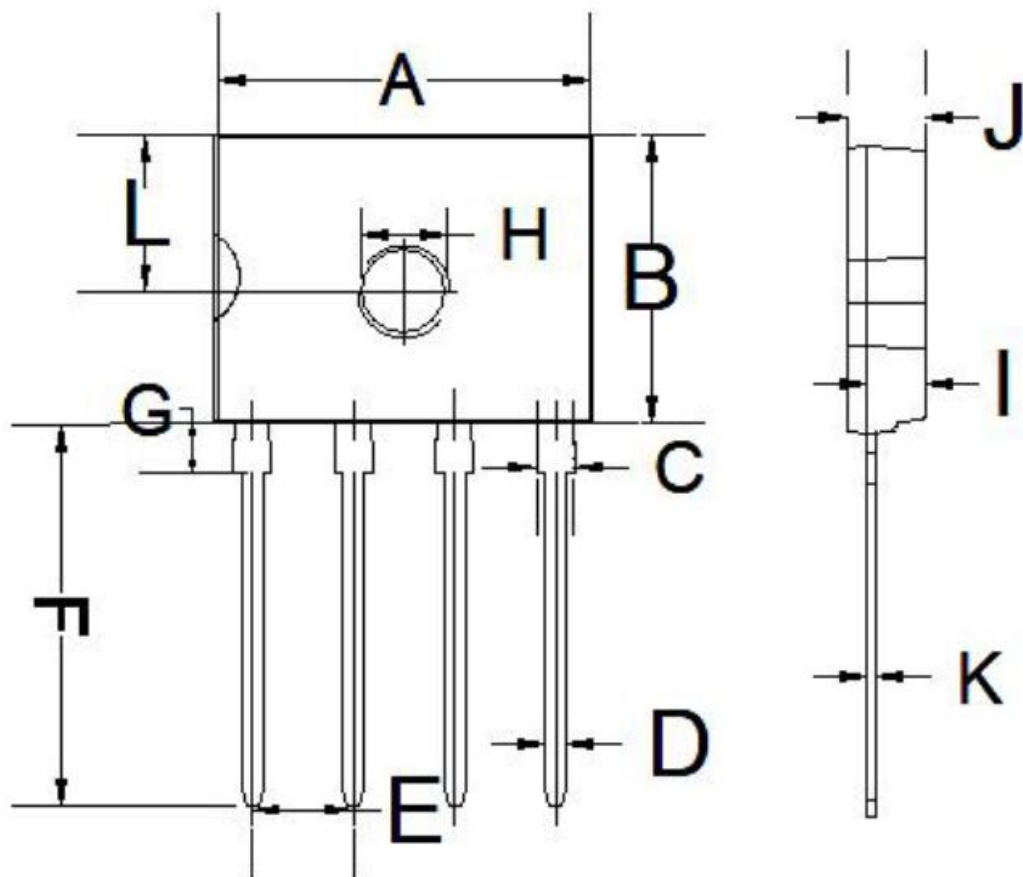


Figure 4. Typical Reverse Leakage Characteristics Per Diode

## ■ Package Information

### D3K Series



Item	Min (mm)	Max (mm)
A	13.95	14.45
B	10.60	11.00
C	1.30	1.50
D	0.77	0.83
E	3.65	3.95
F	14.10	14.70
G	1.70	2.10
H	3.40	3.60
I	2.00	2.40
J	2.90	3.10
K	0.33	0.37
L	5.80	6.00