

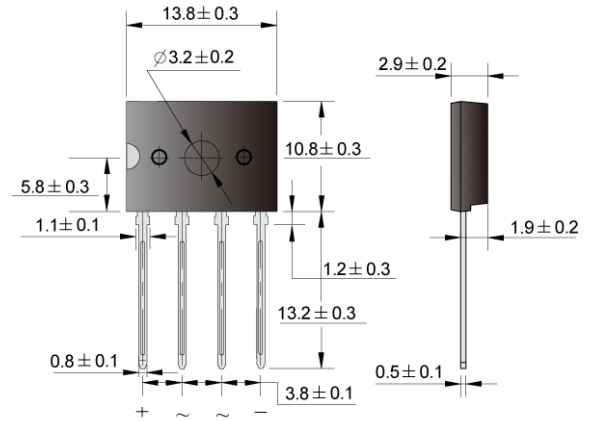
RoHS Compliant Product

A suffix of "-C" specifies halogen-free and RoHS Compliant

**FEATURES**

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- High current capacity with small package
- Glass passivated chip junctions
- Superior thermal conductivity
- High IFSM

**D2-4KB**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)**

| PARAMETERS   | SYMBOL                            | PART NUMBERS    |            |            |            |            |             | UNITS              |
|--|-----------------------------------|-----------------|------------|------------|------------|------------|-------------|--------------------|
|  |                                   | D3KB<br>10      | D3KB<br>20 | D3KB<br>40 | D3KB<br>60 | D3KB<br>80 | D3KB<br>100 |                    |
| Maximum repetitive voltage   | V <sub>RRM</sub>                  | 100             | 200        | 400        | 600        | 800        | 1000        | V                  |
| Maximum RMS voltage  | V <sub>RMS</sub>                  | 70              | 140        | 280        | 420        | 560        | 700         | V                  |
| Maximum DC blocking voltage  | V <sub>DC</sub>                   | 100             | 200        | 400        | 600        | 800        | 1000        | V                  |
| Maximum DC reverse current at @T <sub>A</sub> =25°C                                | I <sub>R</sub>                    | 5               |            |            |            |            |             | μA                 |
| rated DC blocking voltage @T <sub>A</sub> =125°C                                   |                                   | 500             |            |            |            |            |             |                    |
| Average rectified forward current @T <sub>C</sub> =100°C                           | I <sub>O</sub>                    | 3               |            |            |            |            |             | A                  |
| 60Hz Sine wave Resistance load @T <sub>A</sub> =40°C                               |                                   | 1.2             |            |            |            |            |             |                    |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load | I <sub>FSM</sub>                  | 90              |            |            |            |            |             | A                  |
| Rating of fusing (t < 8.3ms)   | I <sup>2</sup> t                  | 35              |            |            |            |            |             | A <sup>2</sup> sec |
| Maximum Instantaneous Forward Voltage @ 2.0A                                       | V <sub>F</sub>                    | 1.0             |            |            |            |            |             | V                  |
| Dielectric strength terminals to case, AC 1 minute Current 1mA                     | V <sub>dia</sub>                  | 2.5             |            |            |            |            |             | KV                 |
| Maximum thermal on P.C.B without heat-sink   | R <sub>θJA</sub>                  | 13.7            |            |            |            |            |             | °C / W             |
| Resistance per leg on Al plate heat-sink   | R <sub>θJC</sub>                  | 5.2             |            |            |            |            |             |                    |
| Operating and Storage Temperature Range  | T <sub>J</sub> , T <sub>STG</sub> | 150 , -55 ~ 150 |            |            |            |            |             | °C                 |

**CHARACTERISTIC CURVES**

Fig. 1 Derating Curve

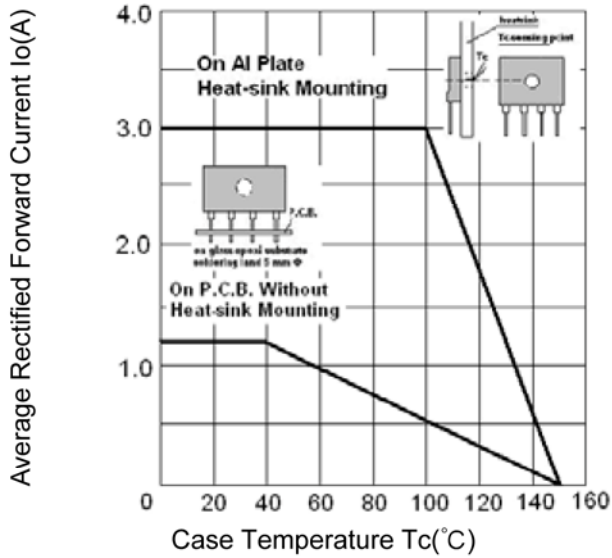


Fig.2 Typical Reverse Characteristics

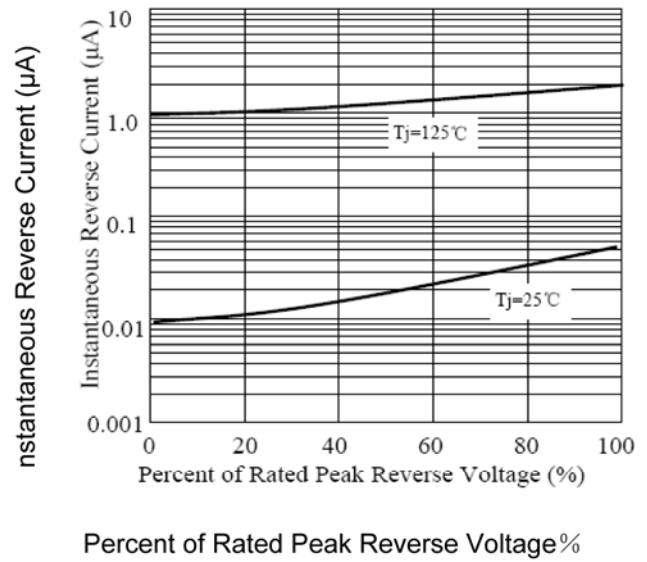


Fig.3 Forward Voltage

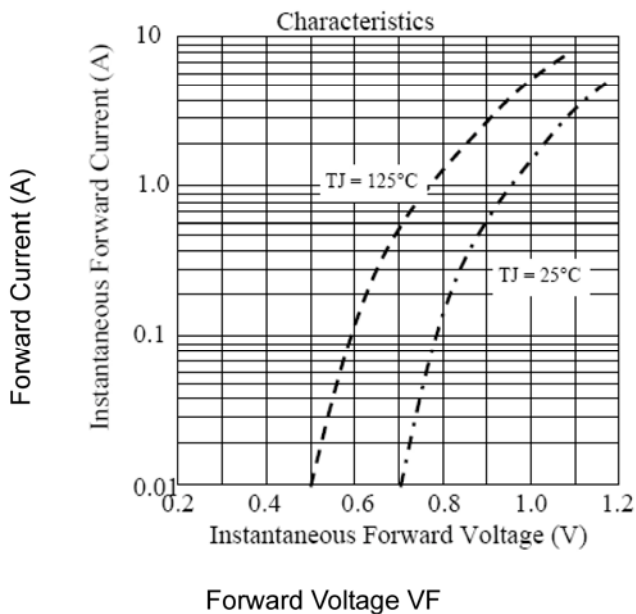


Fig.4 Peak Surge Forward Capability

