

## GLASS PASSIVATED BRIDGE RECTIFIERS

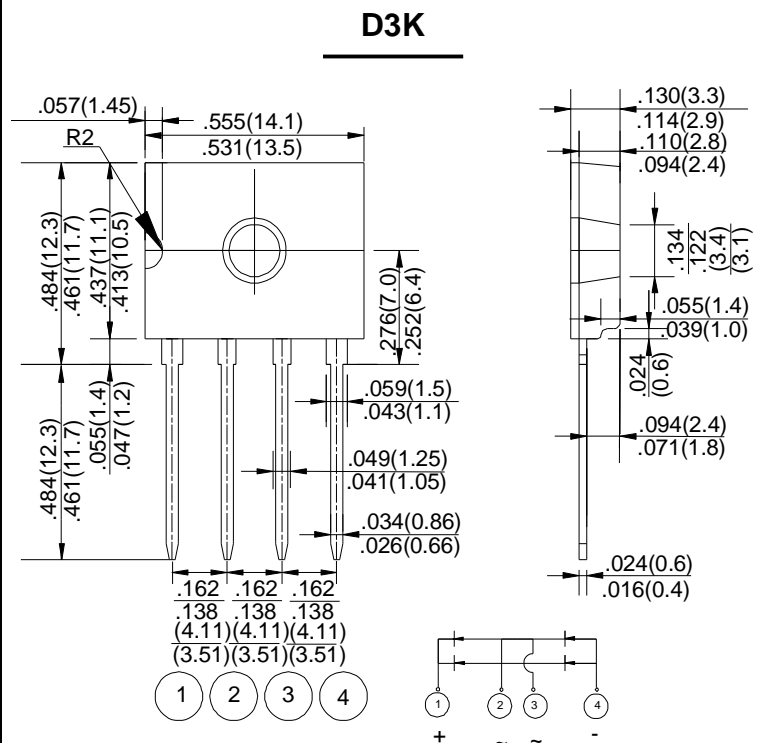
REVERSE VOLTAGE - 50 to 1000Volts  
FORWARD CURRENT - 4.0 Amperes

### FEATURES

- Glass passivated chip junction
  - High case dielectric strength
  - High surge current capability
- Ideal for printed circuit board

### MACHANICAL DATA

- Terminal: Plated leads solderable per MIL-STD 202E, Method 208C
- Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- Polarity: Polarity symbol marked on body
- Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| CHARACTERISTICS   | SYMBOL                  | D4KB05           | D4KB1 | D4KB2 | D4KB4 | D4KB6 | D4KB8 | D4KB10 | UNIT             |
|---|-------------------------|------------------|-------|-------|-------|-------|-------|--------|------------------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>        | 50               | 100   | 200   | 400   | 600   | 800   | 1000   | V                |
| Maximum RMS Voltage   | V <sub>RMS</sub>        | 35               | 70    | 140   | 280   | 420   | 560   | 700    | V                |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>         | 50               | 100   | 200   | 400   | 600   | 800   | 1000   | V                |
| Maximum Average Forward Rectified Output Current<br>@ T <sub>c</sub> =138°C (with heatsink)             | I <sub>(AV)</sub>       | 4                |       |       |       |       |       |        | A                |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method) | I <sub>FSM</sub>        | 135              |       |       |       |       |       |        | A                |
| Maximum Forward Voltage at 2.0A DC  | V <sub>F</sub>          | 1.0              |       |       |       |       |       |        | V                |
| Maximum Forward Voltage at 4.0A DC  | V <sub>F</sub>          | 1.1              |       |       |       |       |       |        | V                |
| I <sup>2</sup> t Rating for Fusing (t<8.3ms)  | I <sup>2</sup> t        | 64.84            |       |       |       |       |       |        | A <sup>2</sup> s |
| Typical Thermal Resistance  | without heatsink        | R <sub>θJa</sub> |       |       |       |       |       |        | °C/W             |
|   | with heatsink           | R <sub>θJC</sub> |       |       |       |       |       |        |                  |
|   | without heatsink        | R <sub>θJL</sub> |       |       |       |       |       |        |                  |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage  | @ T <sub>a</sub> =25°C  | I <sub>R</sub>   |       |       |       |       |       |        | μA               |
|   | @ T <sub>a</sub> =125°C | 500              |       |       |       |       |       |        |                  |
| Operating Temperature Range   | T <sub>J</sub>          | -55 to +150      |       |       |       |       |       |        | °C               |
| Storage Temperature Range   | T <sub>STG</sub>        | -55 to +150      |       |       |       |       |       |        | °C               |

FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT

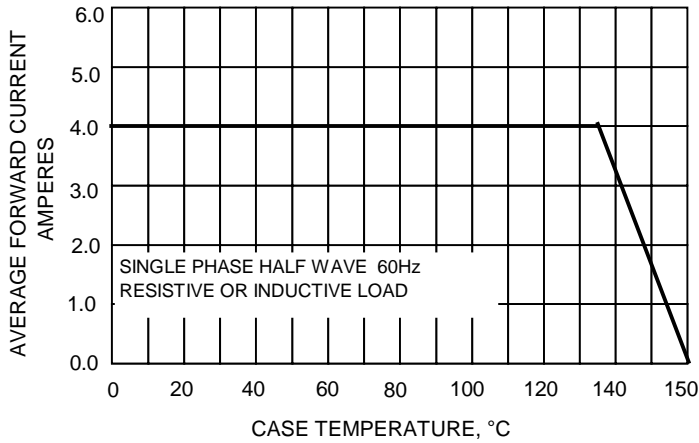


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

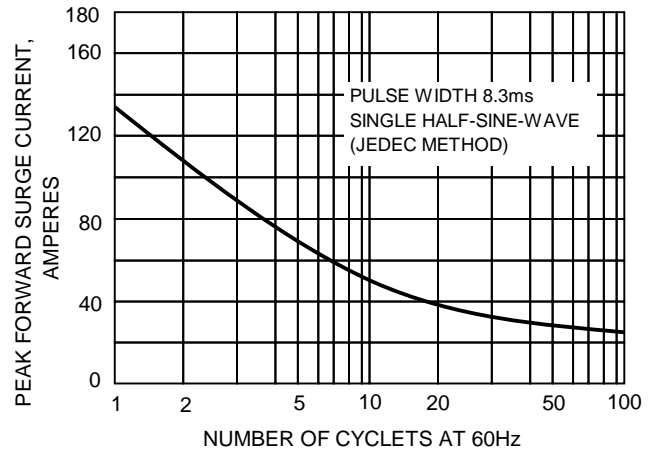


FIG.3-TYPICAL JUNCTION CAPACITANCE

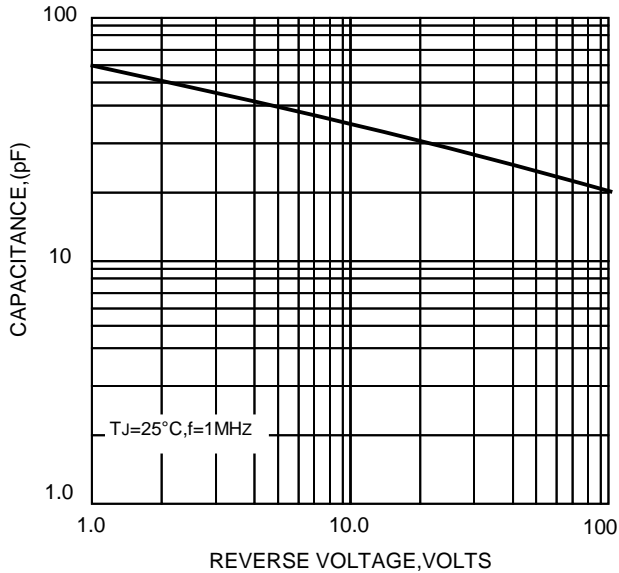


FIG.3-TYPICAL FORWARD CHARACTERISTICS

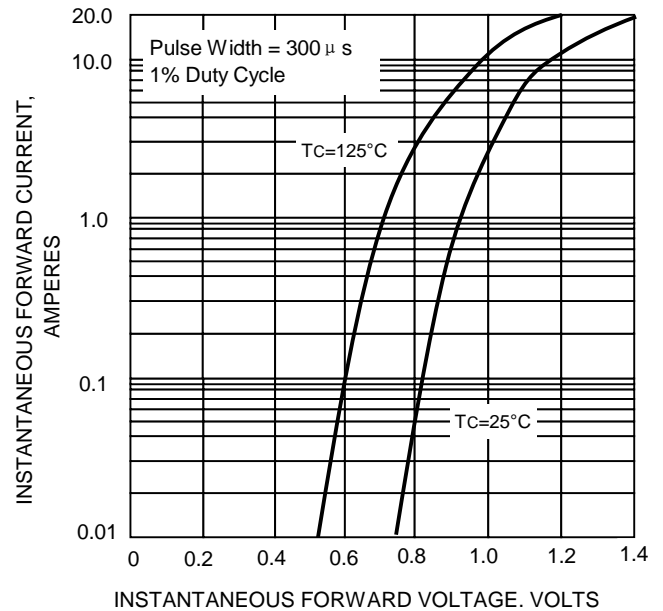


FIG.5-TYPICAL REVERSE CHARACTERISTICS

