

# DB101 - DB107

**PRV : 50 - 1000 Volts**

**Io : 1.0 Ampere**

## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Ideal for printed circuit board
- \* **Pb / RoHS Free**

## MECHANICAL DATA :

- \* Case : Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Terminals : Leads solderable per MIL-STD-202, method 208 guaranteed
- \* Mounting position : Any
- \* Weight : 0.02 ounce, 0.4 gram

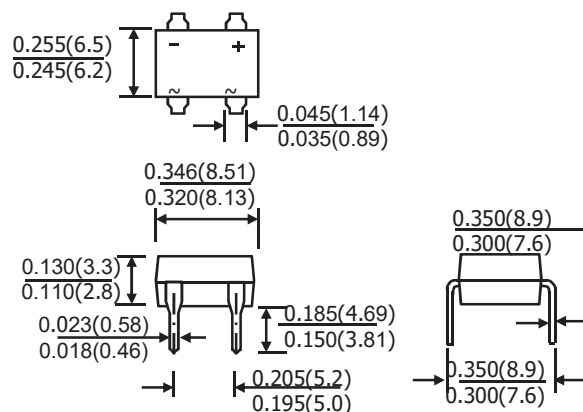
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

60 Hz, resistive or inductive load.

## MINI-BRIDGE RECTIFIERS

### DFM

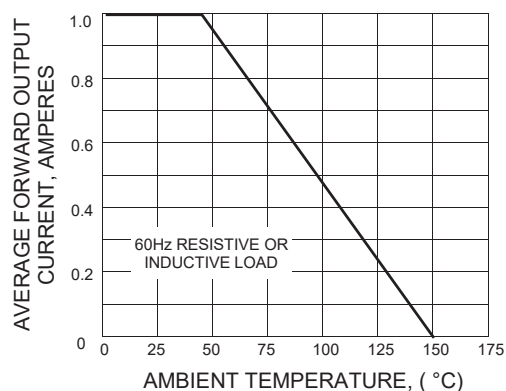


Dimensions in inches and ( millimeters )

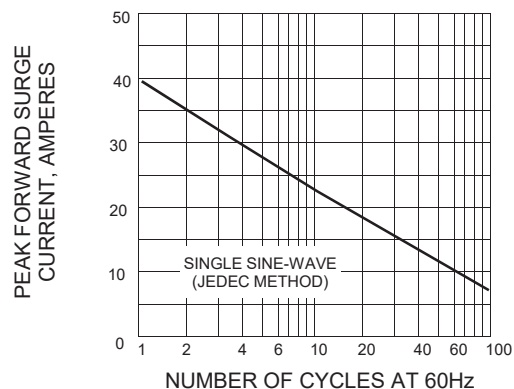
| RATING                                                                                               | SYMBOL   | DB101         | DB102 | DB103 | DB104 | DB105 | DB106 | DB107 | UNIT |
|------------------------------------------------------------------------------------------------------|----------|---------------|-------|-------|-------|-------|-------|-------|------|
| Maximum Recurrent Peak Reverse Voltage                                                               | VRRM     | 50            | 100   | 200   | 400   | 600   | 800   | 1000  | V    |
| Maximum RMS Voltage                                                                                  | VRMS     | 35            | 70    | 140   | 280   | 420   | 560   | 700   | V    |
| Maximum DC Blocking Voltage                                                                          | VDC      | 50            | 100   | 200   | 400   | 600   | 800   | 1000  | V    |
| Maximum Average Forward Output Rectified Current at Ta = 40°C                                        | IF(AV)   | 1.0           |       |       |       |       |       |       | A    |
| Peak Forward Surge Current<br>8.3 ms single half sine wave superimposed on rated load (JEDEC Method) | IFSM     | 40            |       |       |       |       |       |       | A    |
| Maximum Instantaneous Forward Voltage per element at IF = 1.0 A                                      | VF       | 1.1           |       |       |       |       |       |       | V    |
| Maximum DC Reverse Current Ta = 25°C<br>at Rated DC Blocking Voltage Ta = 125°C                      | IR       | 5.0           |       |       |       |       |       |       | μA   |
|                                                                                                      | IR(H)    | 500           |       |       |       |       |       |       | μA   |
| Junction and Storage Temperature Range                                                               | TJ, TSTG | - 55 to + 150 |       |       |       |       |       |       | °C   |

## RATING AND CHARACTERISTIC CURVES ( DB101 - DB107 )

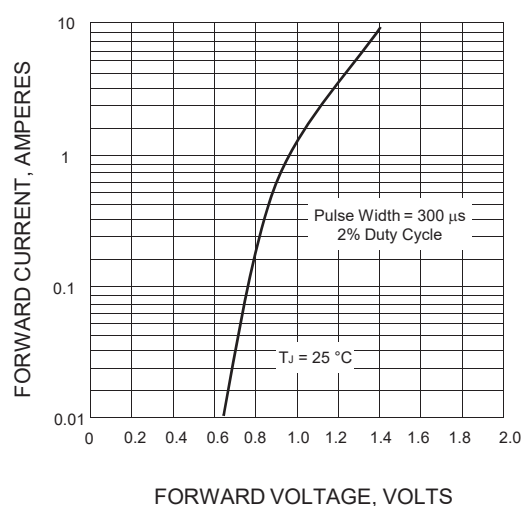
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**

