



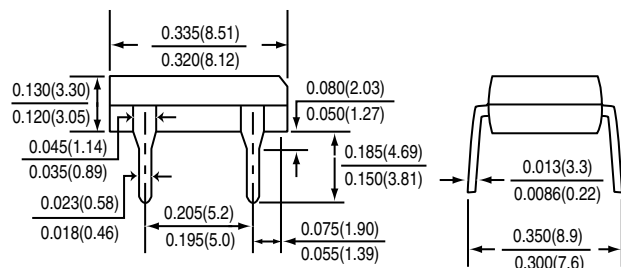
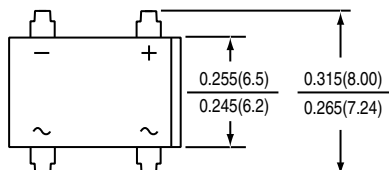
# DB101G THRU DB107G

## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.0 Ampere

DFM



\*Dimensions in inches and (millimeters)



### FEATURES

- \* This series is UL listed under the Recognized Component Index, file number E-96005
- \* Surge overload rating of 50 Amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded plastic technique
- \* High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

### MECHANICAL DATA

**Case :** JEDEC DFM molded plastic body over passivated junction

**Terminals :** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity :** Color band denotes cathode end

**Mounting Position :** Any

**Weight :** 0.04 ounces , 1.0 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Ratings at 25 °C ambient temperature<br>unless otherwise specified.                              | SYMBOLS | DB          |      |      |      |      |      |      | UNITS  |
|--------------------------------------------------------------------------------------------------|---------|-------------|------|------|------|------|------|------|--------|
|                                                                                                  |         | 101G        | 102G | 103G | 104G | 105G | 106G | 107G |        |
| Maximum repetitive peak reverse voltage                                                          | VRRM    | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | Volts  |
| Maximum RMS voltage                                                                              | VRMS    | 35          | 70   | 140  | 280  | 420  | 560  | 700  | Volts  |
| Maximum DC blocking voltage                                                                      | VDC     | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | Volts  |
| Maximum average forward rectified current @TA=40°C                                               | I (AV)  | 1.0         |      |      |      |      |      |      | Amps   |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM    | 50          |      |      |      |      |      |      | Amps   |
| Maximum instantaneous forward voltage at 1.0 A                                                   | VF      | 1.1         |      |      |      |      |      |      | Volts  |
| Maximum reverse current @TA=25°C                                                                 | IR      | 10          |      |      |      |      |      |      | uA     |
| at rated DC blocking voltage per element @TA=125°C                                               |         | 500         |      |      |      |      |      |      |        |
| Typical junction capacitance (NOTE 1)                                                            | CJ      | 25          |      |      |      |      |      |      | pF     |
| Typical thermal resistance (NOTE 2)                                                              | R θJA   | 40          |      |      |      |      |      |      | °C / W |
|                                                                                                  | R θJL   | 15          |      |      |      |      |      |      |        |
| Operating junction and storage temperature range                                                 | TJ,TSTG | -55 to +150 |      |      |      |      |      |      | °C     |

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(2) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 X0.5" (13 X 13mm) copper pads



# RATINGS AND CHARACTERISTIC CURVES DB101G THRU DB107G

FIG.1 - FORWARD CURRENT DERATING CURVE

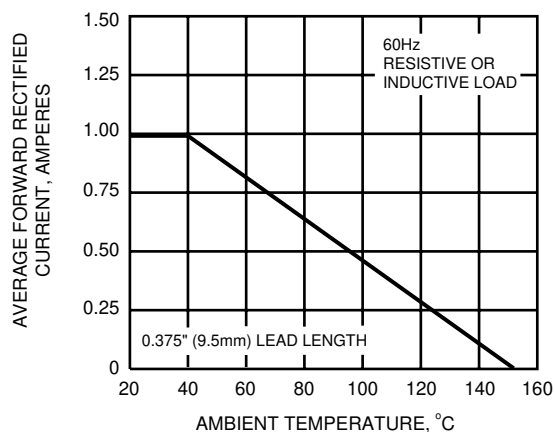


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

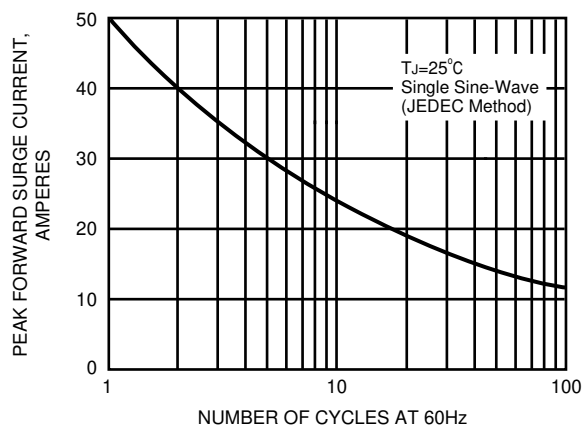


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

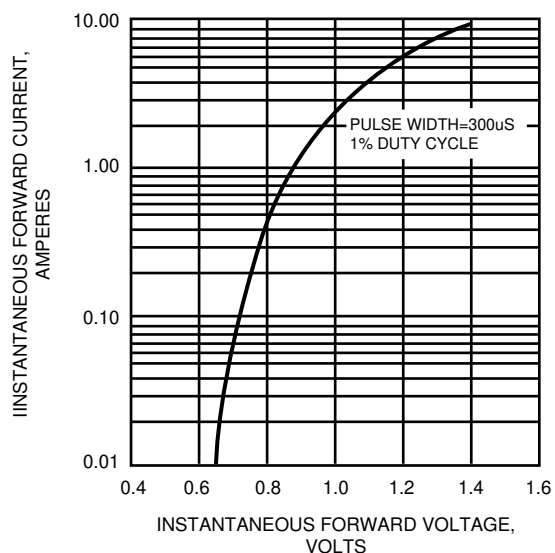


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

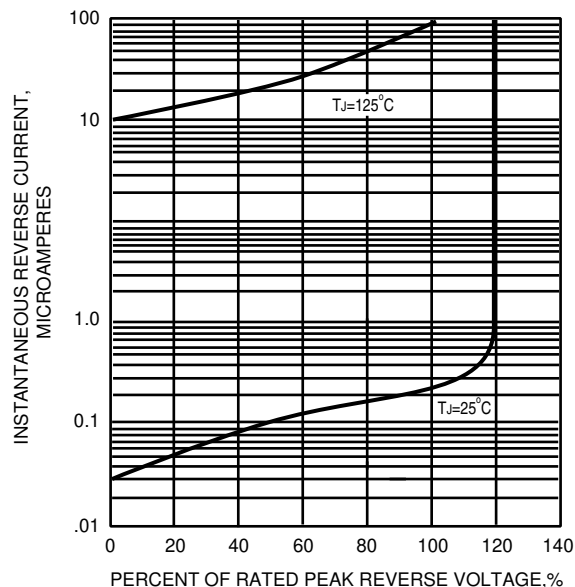


FIG.5 - TYPICAL JUNCTION CAPACITANCE

