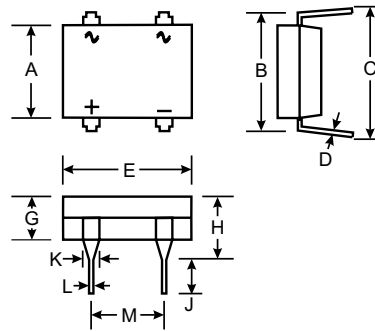


Features

- UL Recognized Component
- Ideal for Printed Circuit Board
- Glass Passivated Chip Junctions, Surge Overload Rating of 50A Peak
- Simple, Compact Structure for Trouble-free Performance
- Plastic Package - UL Flammability Classification 94V-0

Mechanical Data

- Terminals: Tin Plated Leads Solderable per MIL-STD-202, Method 208
- Case: Transfer Molded Epoxy
- Mounting Position: Any
- Polarity: Polarity Symbols Marked on Body
- Approx. Weight: 1.0 grams



| DB-1 | | |
|----------------------|--------------|------|
| Dim | Min | Max |
| A | 6.10 | 6.60 |
| B | 7.11 | 8.13 |
| C | 8.13 | 9.40 |
| D | 0.20 | 0.38 |
| E | - | 9.40 |
| G | - | 3.30 |
| H | - | 5.51 |
| J | 2.80 | 3.68 |
| K | 1.02 | 1.40 |
| L | 0.51 Typical | |
| M | 5.15 Typical | |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic | Symbol | DB 101 | DB 102 | DB 103 | DB 104 | DB 105 | DB 106 | DB 107 | Unit |
|--|-----------------|-------------|--------|--------|--------|--------|--------|--------|---------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Input Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Rectified Output Current @ $T_A = 40^\circ\text{C}$ | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 50 | | | | | | | A |
| Maximum Instantaneous Forward Voltage drop per Element at $I_F = 1.0\text{A}$ | V_F | 1.1 | | | | | | | V |
| Maximum Reverse DC Current at Rated DC Blocking Voltage per Element | I_R | 10 1.0 | | | | | | | μA mA |
| Typical Thermal Resistance (Note 1) | $R_{\theta JA}$ | 40 | | | | | | | K/W |
| Storage and Operating Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

- Notes:
1. Thermal resistance from junction to ambient mounted on PC board with 13mm x 13mm copper pads.
 2. 60 Hz resistive or inductive load.
 3. For capacitive load, derate current by 20%.

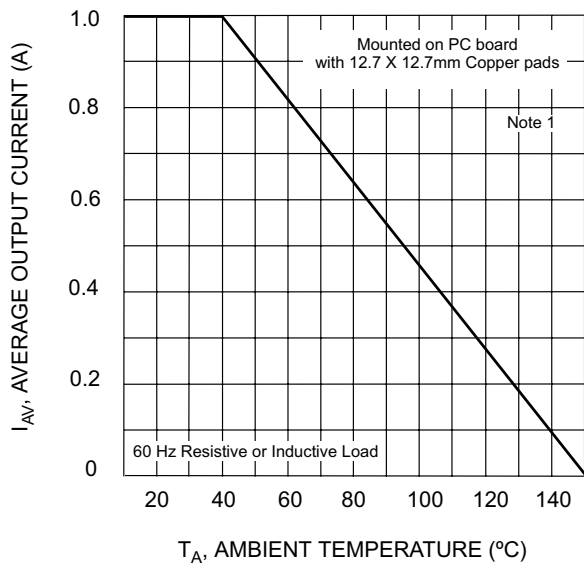


Fig. 1 Maximum Output Rectified Current

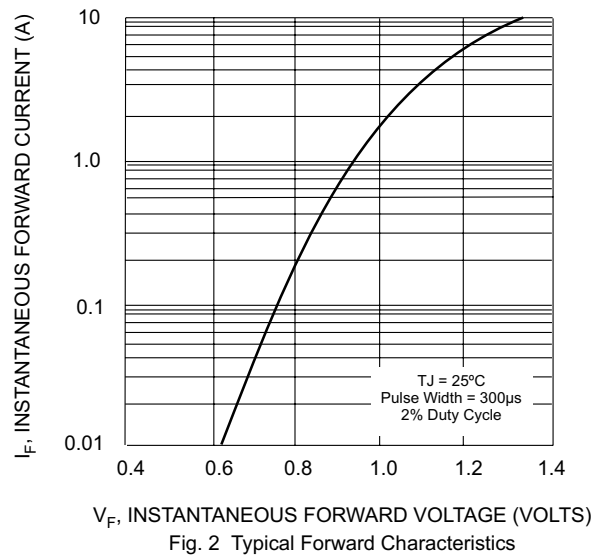


Fig. 2 Typical Forward Characteristics

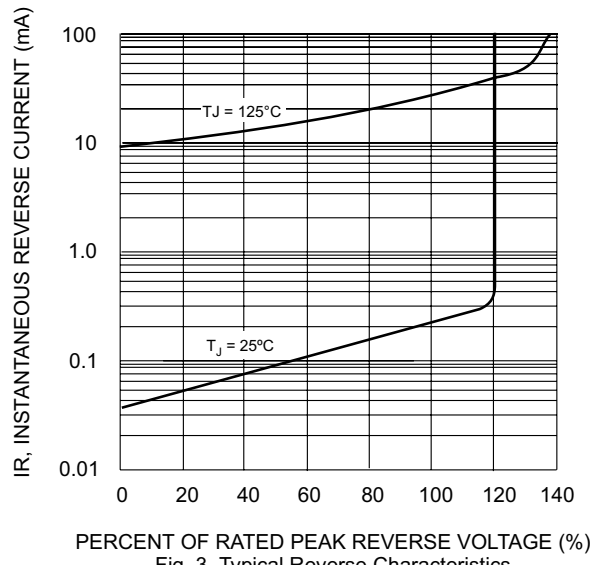


Fig. 3 Typical Reverse Characteristics

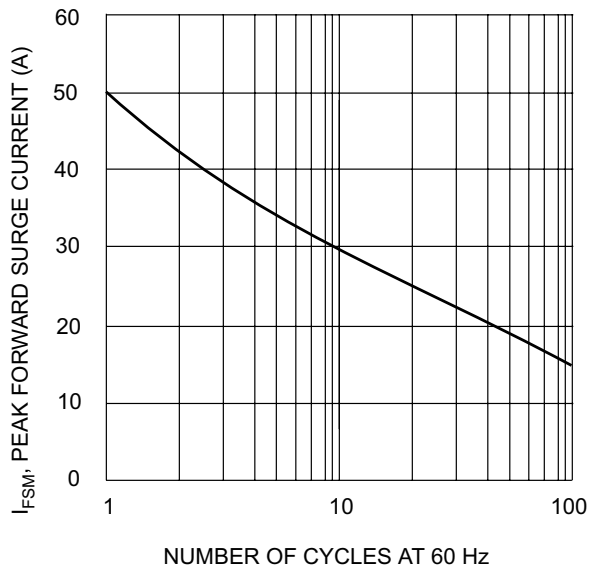


Fig. 4 Max Non-Repetitive Peak Forward Surge Current