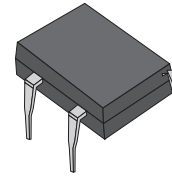


## DB101-G Thru. DB107-G

**Reverse Voltage: 50 to 1000V**

**Forward Current: 1.0A**

**RoHS Device**

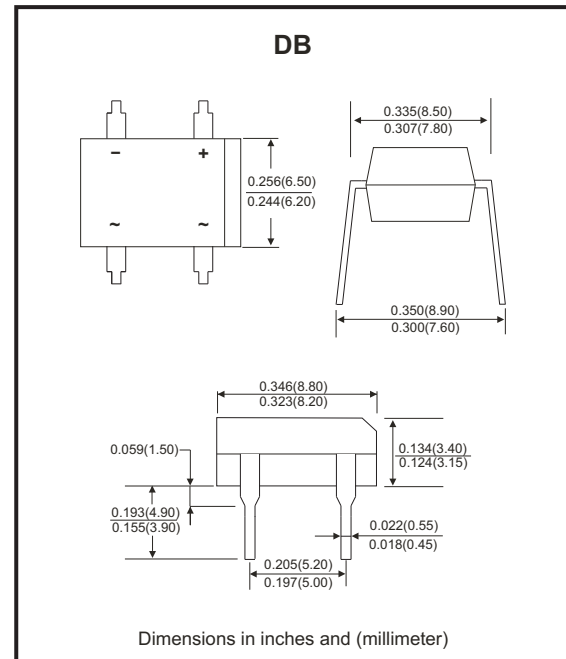


### Features

- Rating to 1000V PRV.
- Ideal for printed circuit board.
- Low forward voltage drop.
- High current capability.
- The plastic material has UL flammability classification 94V-0
- UL recognized file # E349301 

### Mechanical Data

- Polarity: As marked on Body.
- Weight: 0.38 grams.
- 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%

| Parameter                                                                                                     | Symbol          | DB 101-G        | DB 102-G | DB 103-G | DB 104-G | DB 105-G | DB 106-G | DB 107-G | Unit                 |
|---------------------------------------------------------------------------------------------------------------|-----------------|-----------------|----------|----------|----------|----------|----------|----------|----------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                        | $V_{RRM}$       | 50              | 100      | 200      | 400      | 600      | 800      | 1000     | V                    |
| Maximum RMS 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 Forward Rectified Current @ $T_A=40^\circ\text{C}$                                            | $I_{(AV)}$      | 1.0             |          |          |          |          |          |          | A                    |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)            | $I_{FSM}$       | 30              |          |          |          |          |          |          | A                    |
| $I^2t$ Rating For Fusing ( $t < 8.3\text{ms}$ )                                                               | $I^2t$          | 3.735           |          |          |          |          |          |          | $\text{A}^2\text{s}$ |
| Maximum Forward Voltage At 1.0A DC                                                                            | $V_F$           | 1.1             |          |          |          |          |          |          | V                    |
| Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$ | $I_R$           | 10<br>500       |          |          |          |          |          |          | $\mu\text{A}$        |
| Typical Junction Capacitance (Note 1)                                                                         | $C_J$           | 25              |          |          |          |          |          |          | pF                   |
| Typical Thermal Resistance (Note 2)                                                                           | $R_{\theta JA}$ | 40              |          |          |          |          |          |          | $^\circ\text{C/W}$   |
| Operating Temperature Range                                                                                   | $T_J$           | $-55 \sim +150$ |          |          |          |          |          |          | $^\circ\text{C}$     |
| Storage Temperature Range                                                                                     | $T_{STG}$       | $-55 \sim +150$ |          |          |          |          |          |          | $^\circ\text{C}$     |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient mounted on P.C.B with 0.5"×0.5" (13×13mm) copper pads.

Company reserves the right to improve product design, functions and reliability without notice.

REV: C

Rating and Characteristics Curves (DB101-G Thru. DB107-G)

Fig.1 - Forward Current Derating Curve

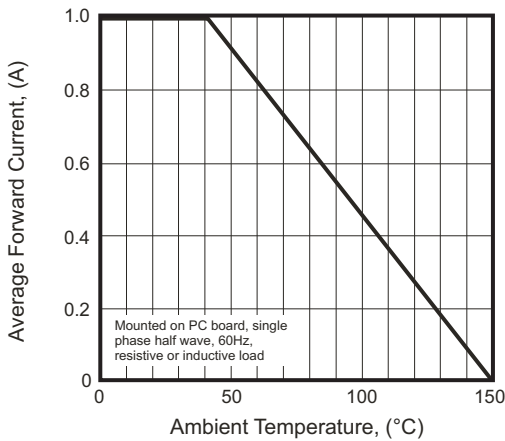


Fig.2 - Typical Forward Characteristics

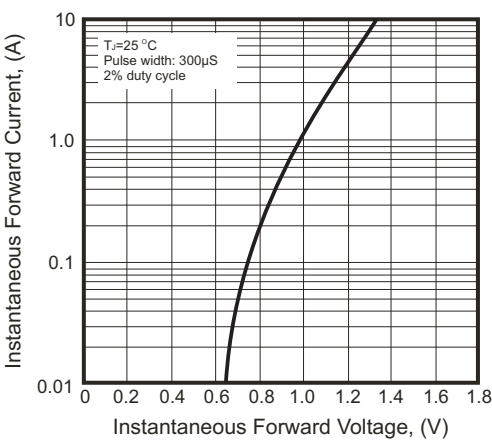


Fig.3 - Maximum Non-repetitive Surge Current

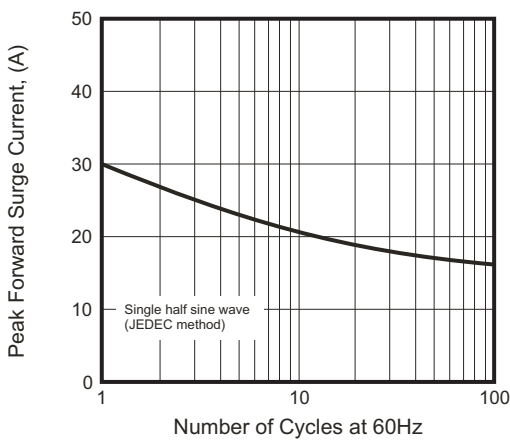


Fig.4 - Typical Junction Capacitance

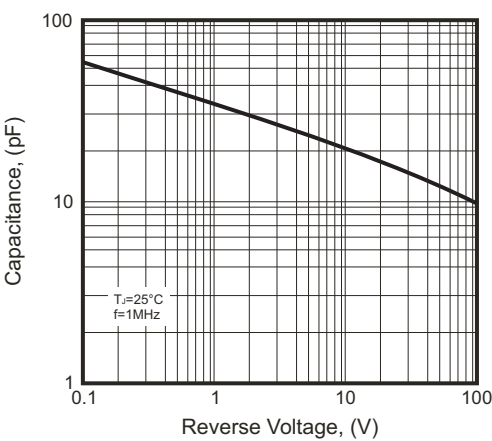
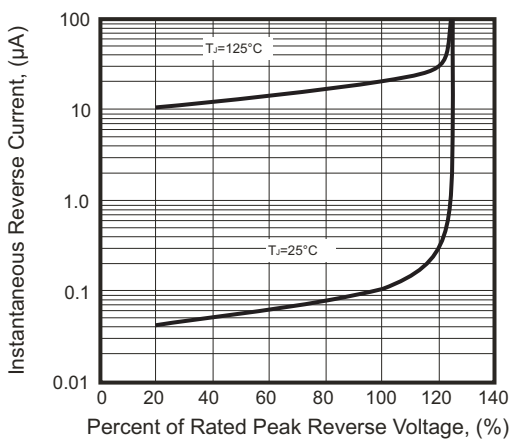
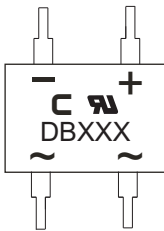


Fig.5 - Typical Reverse Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| DB101-G     | DB101        |
| DB102-G     | DB102        |
| DB103-G     | DB103        |
| DB104-G     | DB104        |
| DB105-G     | DB105        |
| DB106-G     | DB106        |
| DB107-G     | DB107        |



XXX = Product type marking code  
C = Comchip Logo

## Standard Packaging

| Case Type | TUBE PACK       |                |
|-----------|-----------------|----------------|
|           | TUBE<br>( pcs ) | BOX<br>( pcs ) |
| DB        | 50              | 2,500          |

# Mouser Electronics

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