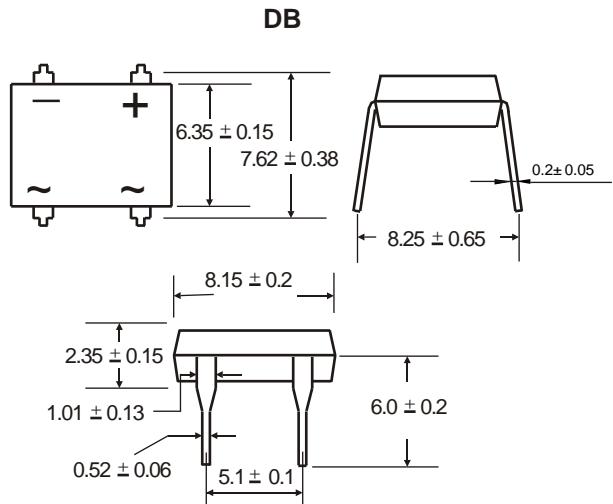


2.0 A Single-Phase Glass Passivated Bridge Rectifiers

Rectifier Reverse Voltage 50 to 1000V

Features

- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 50 amperes
- Ideal for printed circuit board application
- High temperature soldering guaranteed 260 °C / 5 seconds at 5 lbs (2.3kg) tension



Dimensions in millimeters (1mm =0.0394")

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

| Parameter | Symbol | DB201 | DB202 | DB203 | DB204 | DB205 | DB206 | DB207 | unit |
|---|------------------|-------|-------|-------|--------------|-------|-------|-------|--------------------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS bridge input 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 rectified output current at TA=40°C | IF(AV) | | | | 2.0 | | | | A |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | IFSM | | | | 50 | | | | A |
| Rating for fusing (t<8.3ms) | I ² t | | | | 6.35 | | | | A ² sec |
| Typical thermal resistance per element (1) | ReJA | | | | 58 | | | | °C / W |
| Typical junction capacitance per element (2) | C | | | | 25.0 | | | | pF |
| Operating junction and storage temperature range | TJ, TSTG | | | | -55 to + 150 | | | | °C |

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

| Parameter | Symbol | DB201 | DB202 | DB203 | DB204 | DB205 | DB206 | DB207 | Unit |
|---|--------|-------|-------|-------|-----------|-------|-------|-------|------|
| Maximum instantaneous forward voltage drop per leg at 2.0A | VF | | | | 1.1 | | | | V |
| Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C | IR | | | | 10 500 | | | | μA |

Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.

(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

Rating and Characteristic Curves ($T_A=25^\circ\text{C}$ Unless otherwise noted)

DB201 thru DB207

Fig. 1 Derating Curve for Output Rectified Current

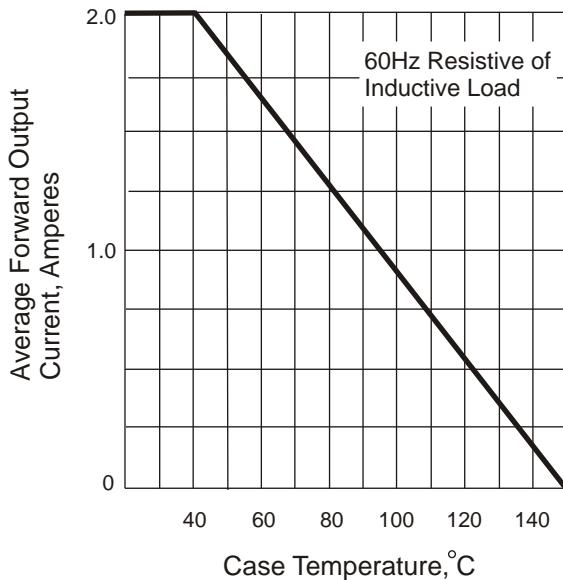


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

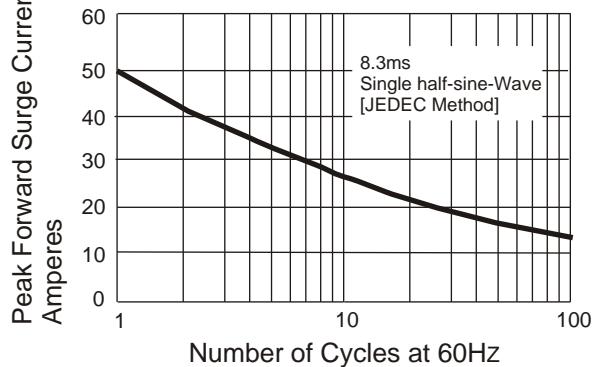


Fig. 3 Typical Instantaneous Forward Characteristics

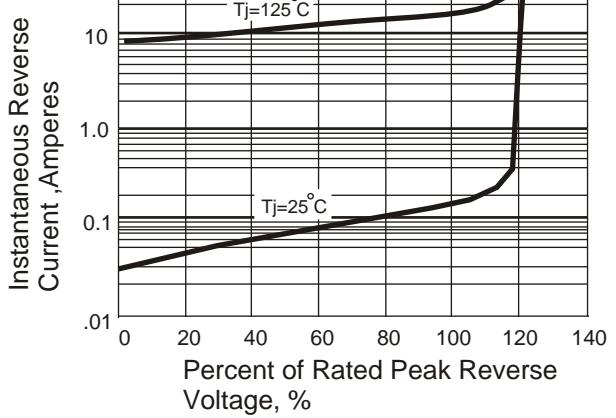
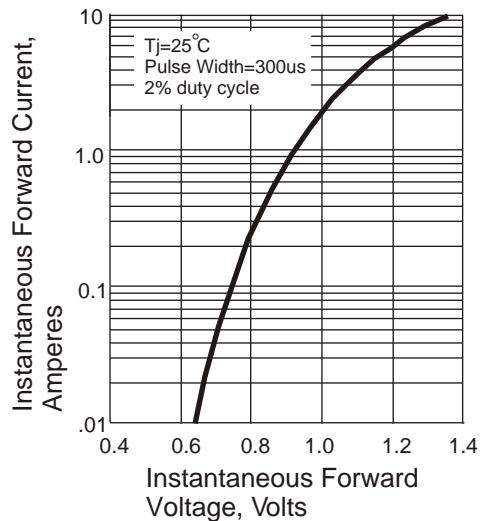


Fig. 4 Typical Revers Characteristics

