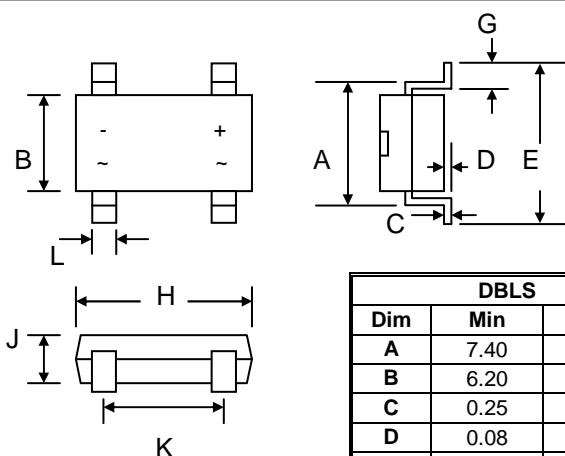


Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-0



Mechanical Data

- Case: **DBLS** , Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.38 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version**

| DBLS | | |
|----------------------|------|-------|
| Dim | Min | Max |
| A | 7.40 | 7.90 |
| B | 6.20 | 6.50 |
| C | 0.25 | — |
| D | 0.08 | 0.33 |
| E | 9.30 | 10.30 |
| G | 1.02 | 1.53 |
| H | 8.00 | 8.51 |
| J | 2.15 | 3.40 |
| K | 5.00 | 5.20 |
| L | 0.90 | 1.20 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristic | Symbol | HDBL 201G | HDBL 202G | HDBL 203G | HDBL 204G | HDBL 205G | HDBL 206G | HDBL 207G | Unit |
|--|--|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 800 | V |
| Average Rectified Output Current @T _L = 100°C | I _O | 2.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 60 | | | | | | | A |
| Forward Voltage @I _F = 2.0A | V _{FM} | 1.0 | | 1.3 | | 1.7 | | | V |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C | I _{RM} | 10 500 | | | | | | | μA |
| Reverse Recovery Time (Note 1) | t _{rr} | 50 | | | | 75 | | | nS |
| Typical Junction Capacitance (Note 2) | C _j | 15 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | R _{θJL} | 15 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to +150 | | | | | | | °C |

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A. See figure 5.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm² land area.

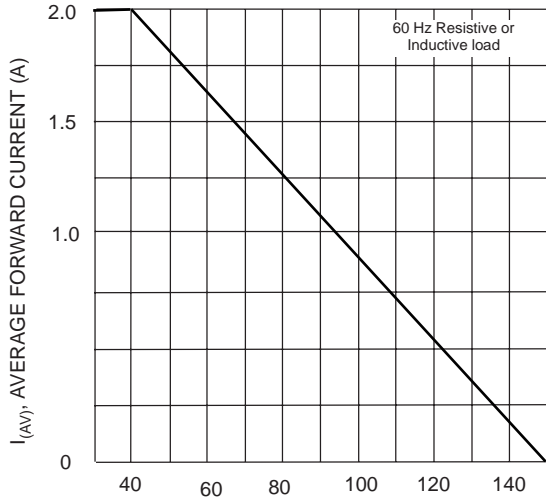


Fig. 1 Output Current Derating Curve

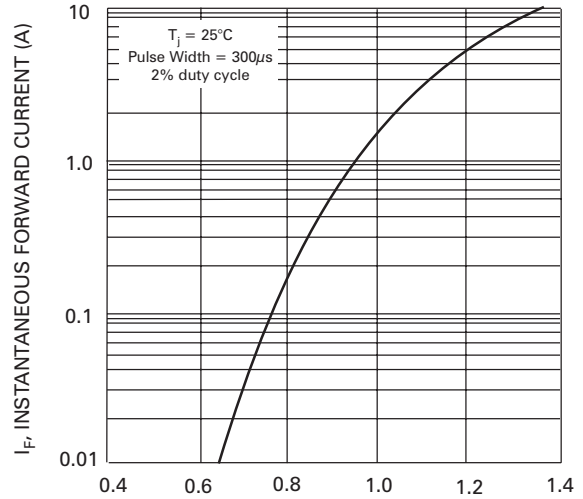


Fig. 2 Typ Forward Characteristics (per element)

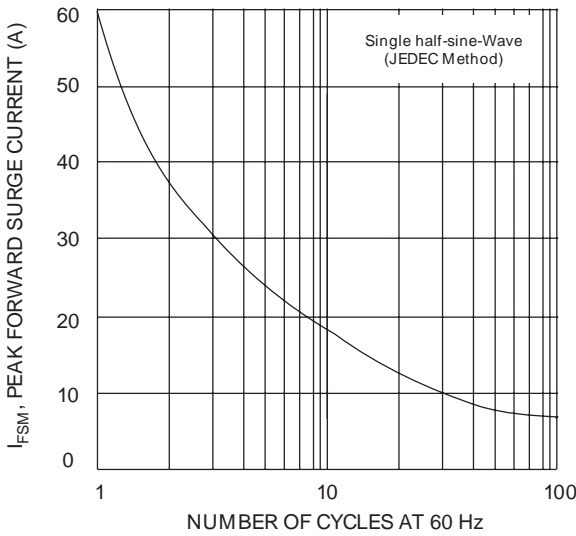


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

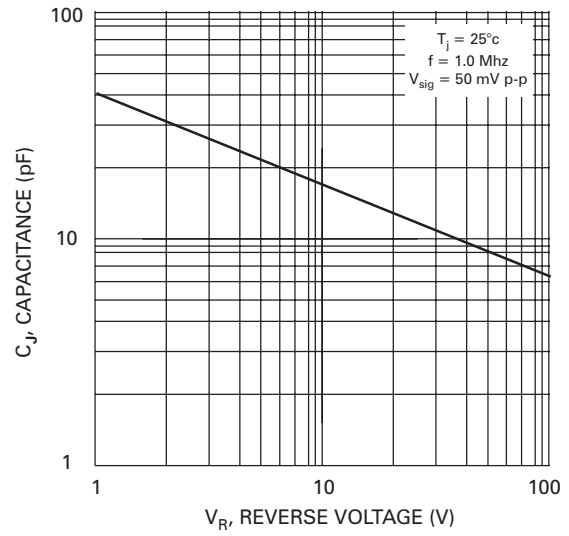


Fig. 4 Typ Junction Capacitance (per element)

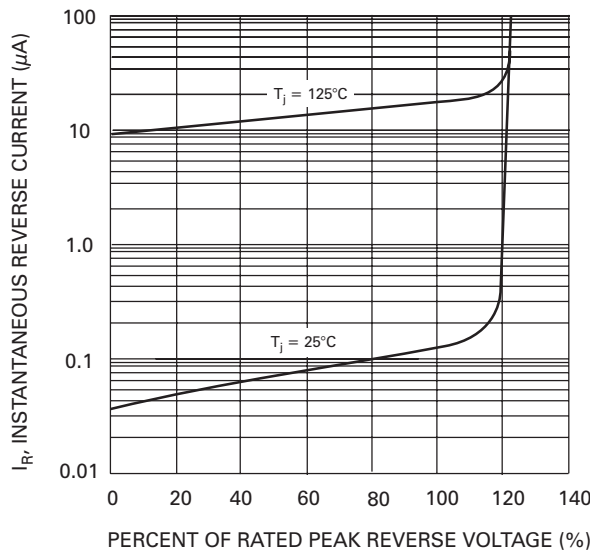


Fig. 5 Typ Reverse Characteristics (per element)