



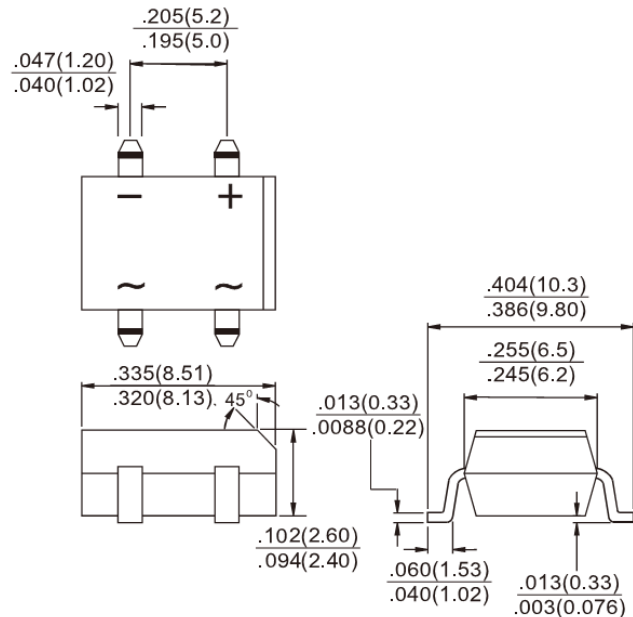
RoHS
COMPLIANCE



DBLS

Features

- ✧ UL Recognized File # E-326854
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique
- ✧ High temperature soldering guaranteed:
260°C / 10 seconds at 5lbs., (2.3kg) tension
- ✧ High surge current capability
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- ✧ Weight: 0.36 grams

Dimensions in inches and (millimeters)

Marking Diagram



- DBLS10XG = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Type Number | Symbol | DBLS 101G | DBLS 102G | DBLS 103G | DBLS 104G | DBLS 105G | DBLS 106G | DBLS 107G | Unit |
|--|------------------------------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| Maximum Repetitive 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 @ $T_A=40^\circ C$ | $I_{F(AV)}$ | 1 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 40 | | | | | 30 | | A |
| Maximum Instantaneous Forward Voltage (Note 1) @1.0A | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Block Voltage @ $T_A=125^\circ C$ | I_R | 10 500 | | | | | | | μA |
| Typical Junction Capabitanace | C_j | 25 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ $R_{\theta JL}$ | 40 15 | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_J | - 55 to + 150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | - 55 to + 150 | | | | | | | $^\circ C$ |

Notes 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Notes 2: Mounted On P.C.B. with 2" x 2" (5 x 5mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (DBLS101G THRU DBLS107G)

FIG. 1 FORWARD CURRENT DERATING CURVE

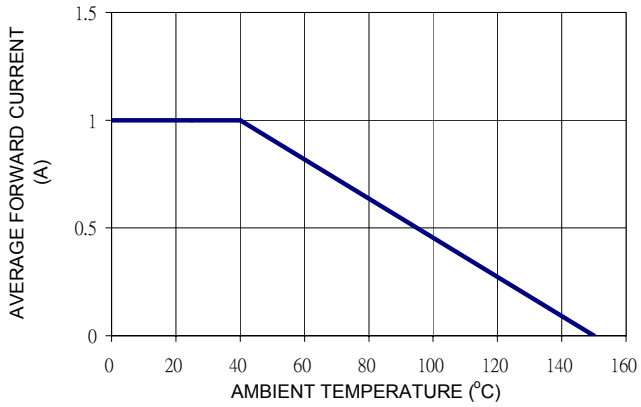


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

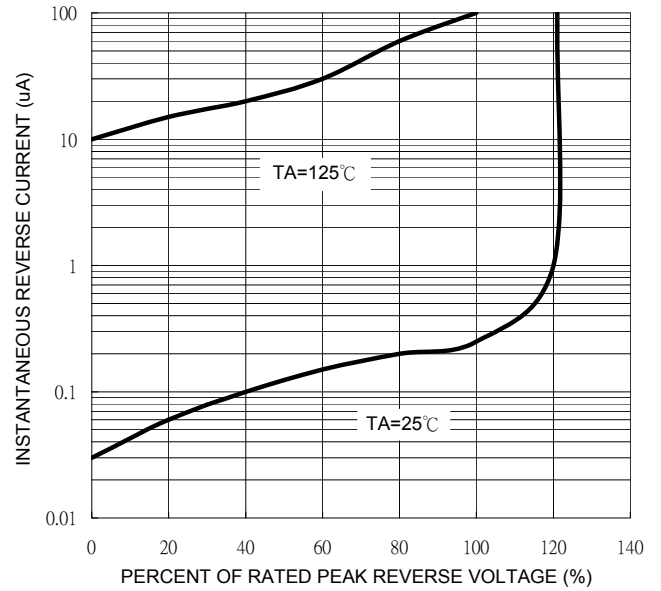


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

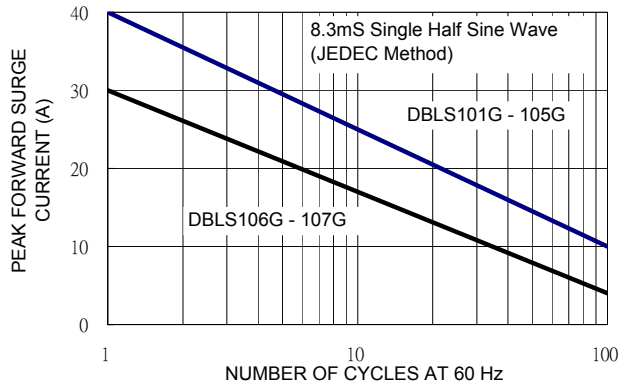


FIG. 4 TYPICAL JUNCTION CAPACITANCE

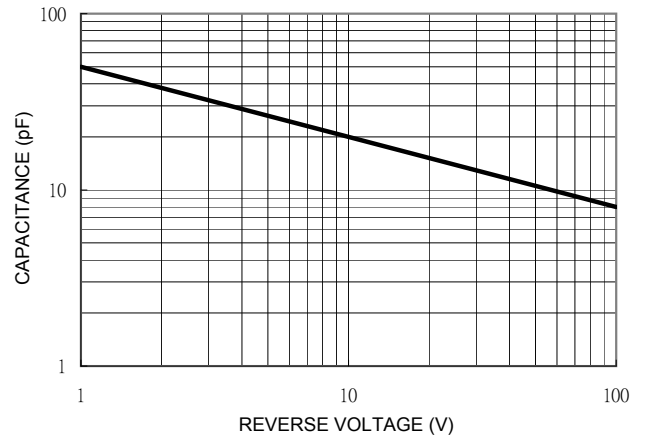


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

