

DB101(DF005) THRU DB107(DF10)



GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage: 50 to 1000 Volts
Forward Current: 1.0 Amps

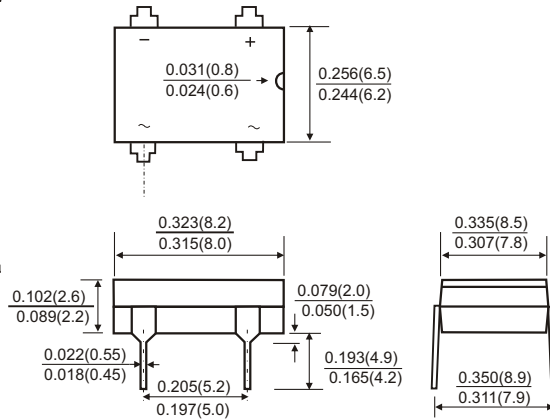
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: DB molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any
- Weight: 0.02ounce, 0.38 gram

DB



Dimensions in inches and (millimeters)

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%.)

| | Symbols | DB101 DF005 | DB102 DF01 | DB103 DF02 | DB104 DF04 | DB105 DF06 | DB106 DF08 | DB107 DF10 | Units |
|--|------------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current | I(AV) | 1.0 | | | | | | | Amp |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 50 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage at 1.0 A DC | V _F | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at rated DC blocking voltage | T _A =25 °C | 10 | | | | | | | μA |
| | T _A =125 °C | 500 | | | | | | | |
| Typical junction capacitance(Note 1) | C _J | 25 | | | | | | | pF |
| Typical thermal resistance(Note 2) | R _{θJA} | 40 | | | | | | | K/W |
| Operating junction and storage temperature range | T _J T _{STG} | -55 to +150 | | | | | | | °C |

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

2. Thermal resistance junction to ambient mounted on P.C.B. With 05*0.5 inches(1.3*1.3mm) copper pads

RATINGS AND CHARACTERISTIC CURVES DB101 (DF005) THRU DB107 (DF10)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

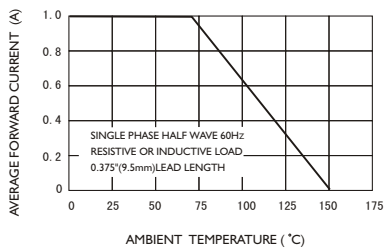


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

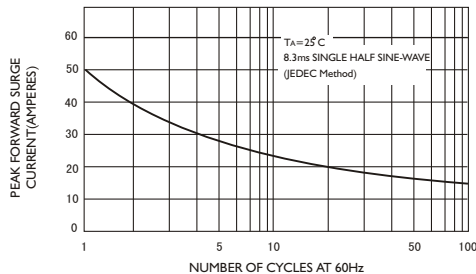


FIG3-TYPICAL JUNCTION CAPACITANCE

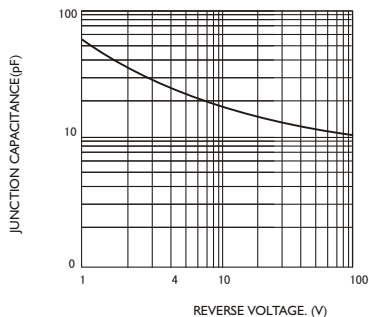


FIG4-TYPICAL FORWARD CHARACTERISTICS

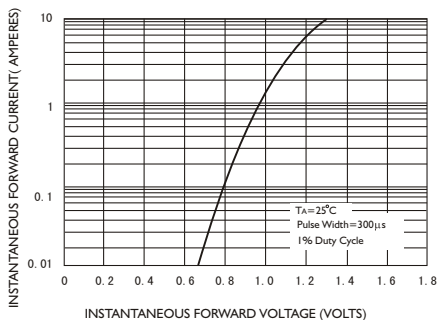


FIG.5-TYPICAL REVERSE CHARACTERISTICS

