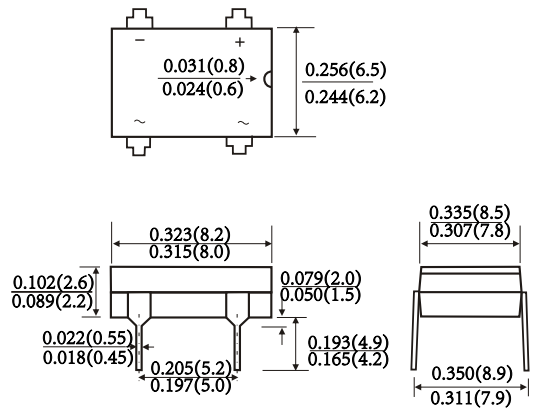
# DB-1 SILICON BRIDGE RECTIFIERV

## FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 ℃/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

## MECHANICAL DATA

- Case style: DB-1 molded plastic
- Mounting position: Any




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

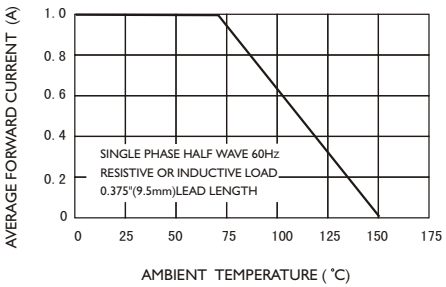
Ratings at 25℃ ambient temperature unless otherwise specified.

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

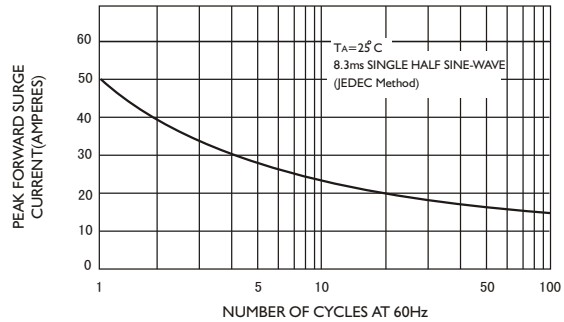
| TYPE NUMBER | Symbols | DB101 | DB102 | DB103 | DB104 | DB105 | DB106 | DB107 | Units |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 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 | $I_R$ | 10 | | | | | | | μA |
| Maximum DC Reverse Current at rated DC blocking voltage $T_A$=125 °C | $I_R$ | 500 | | | | | | | μA |
| Typical junction capacitance(Note1) | $C_J$ | 25 | | | | | | | pF |
| Typical thermal resistence(Note 2) | $R_{\theta JA}$ | 40 | | | | | | | K/W |
| Operating junction and storage temperature range | $T_J$ $T_{STG}$ | -55 to +150 | | | | | | | ℃ |

# RATINGS AND CHARACTERISTIC CURVES

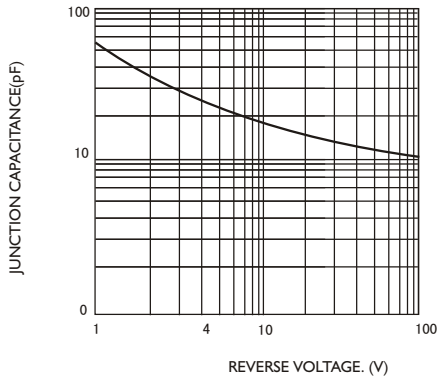
## FIG.1-TYPRCAL FORWARD CURRENT DERATING CURVE



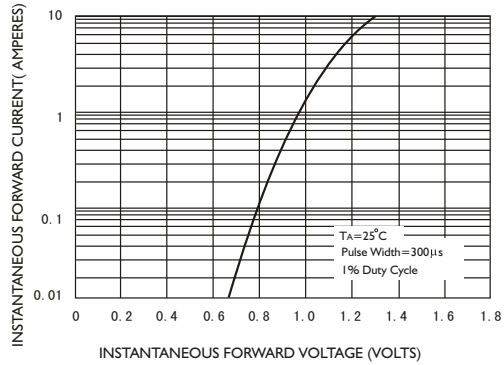

## FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

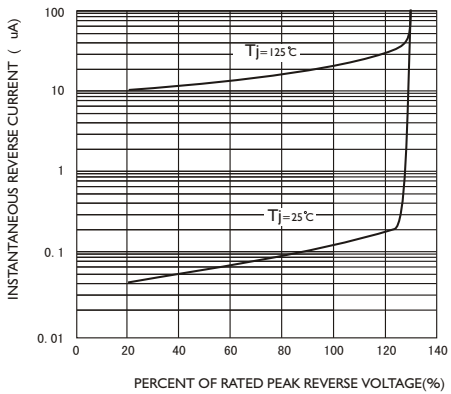



## FIG.3-TYPICAL JUNCTION CAPACITANCE




## FIG.4-TYPICAL FORWARD CHARACTERISTICS




## FIG.5-TYPICAL REVERSE CHARACTERISTICS