

# Single Phase Glass Passivated Silicon Bridge Rectifier

$$V_{RRM} = 50 \text{ V} - 400 \text{ V}$$

$$I_O = 1 \text{ A}$$

## Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- Small size, simple installation
- Types from 50 V up to 400 V  $V_{RRM}$
- Not ESD Sensitive

## Mechanical Data

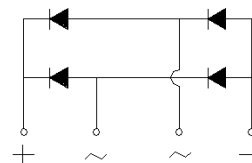
Case: Molded plastic

Terminals: Plated terminals, solderable per MIL-STD-202, Method 208

Polarity: Polarity symbols marked on the body

Mounting position: Any

DB Package



## Maximum ratings at $T_c = 25^\circ\text{C}$ , unless otherwise specified

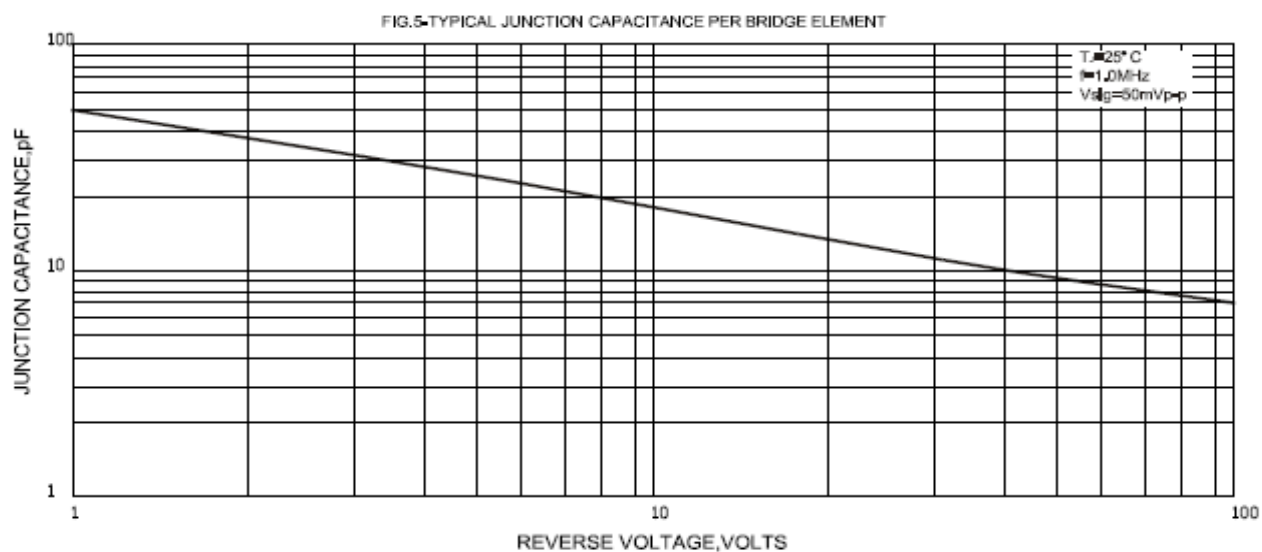
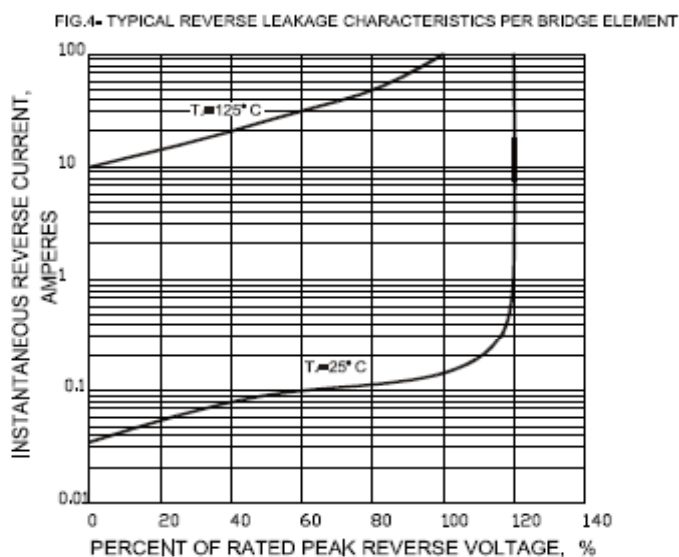
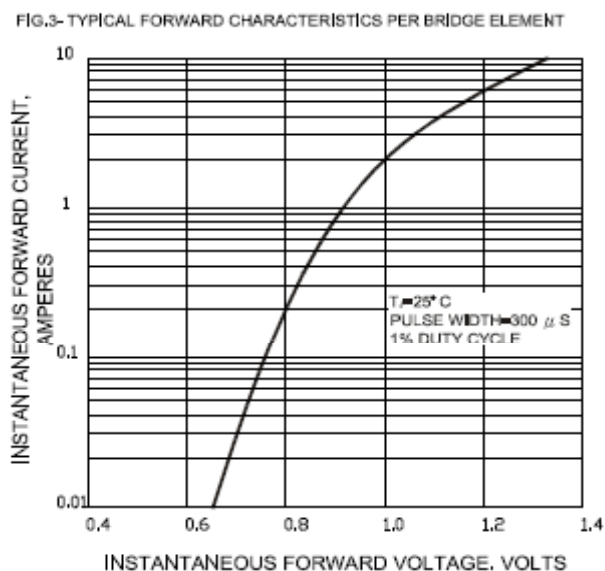
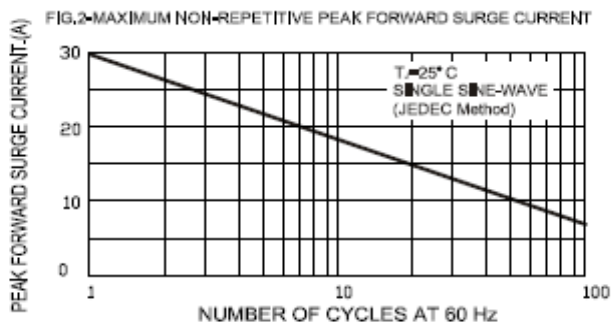
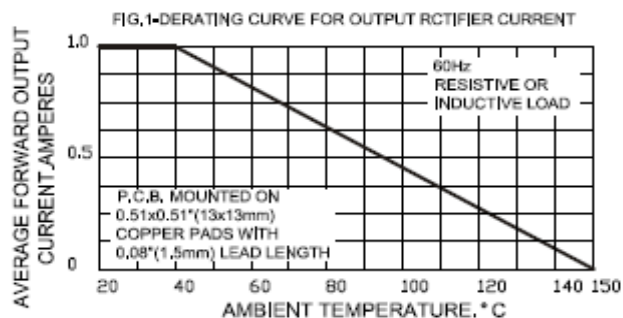
| Parameter                       | Symbol    | Conditions | DB101G     | DB102G     | DB103G     | DB104G     | Unit             |
|---------------------------------|-----------|------------|------------|------------|------------|------------|------------------|
| Repetitive peak reverse voltage | $V_{RRM}$ |            | 50         | 100        | 200        | 400        | V                |
| RMS reverse voltage             | $V_{RMS}$ |            | 35         | 70         | 140        | 280        | V                |
| DC blocking voltage             | $V_{DC}$  |            | 50         | 100        | 200        | 400        | V                |
| Operating temperature           | $T_j$     |            | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | $^\circ\text{C}$ |
| Storage temperature             | $T_{stg}$ |            | -55 to 150 | -55 to 150 | -55 to 150 | -55 to 150 | $^\circ\text{C}$ |

## Electrical characteristics at $T_c = 25^\circ\text{C}$ , unless otherwise specified

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

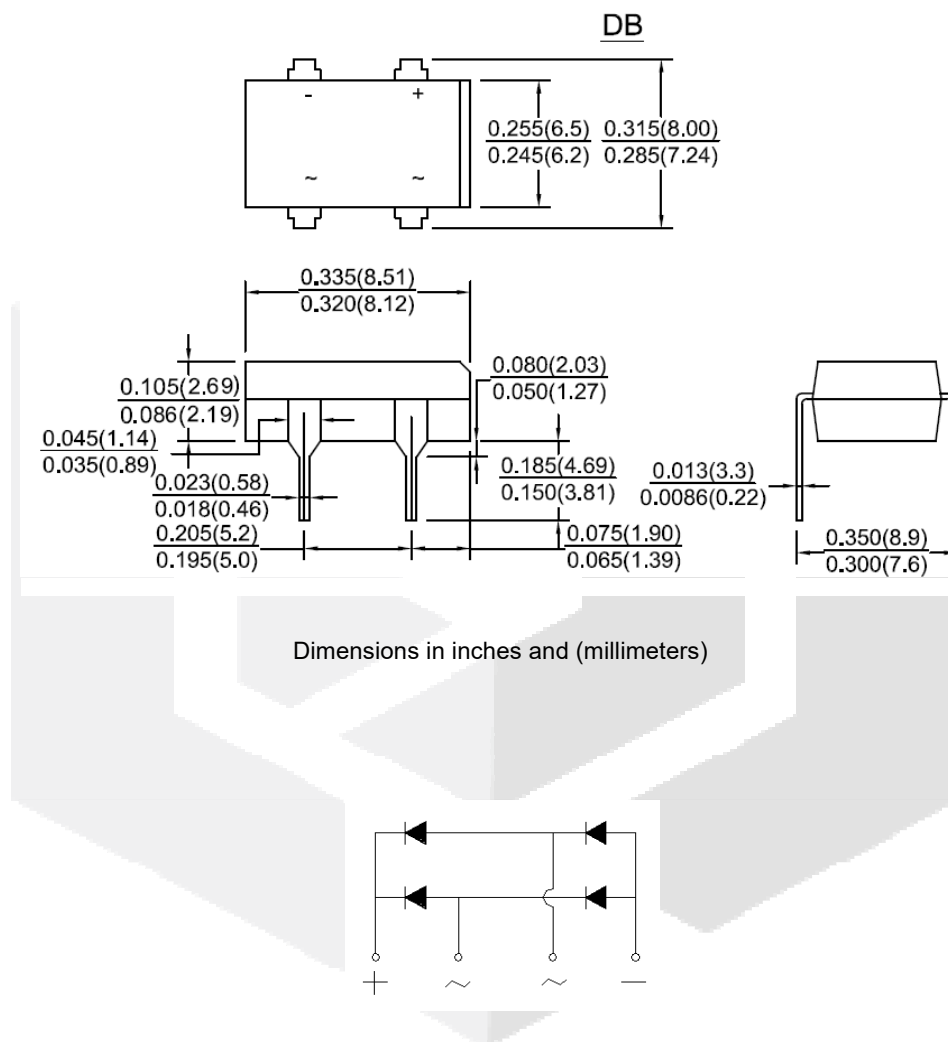
For capacitive load derate current by 20%

| Parameter                                               | Symbol          | Conditions                         | DB101G | DB102G | DB103G | DB104G | Unit               |
|---------------------------------------------------------|-----------------|------------------------------------|--------|--------|--------|--------|--------------------|
| Maximum average forward rectified current               | $I_O$           | $T_a = 40^\circ\text{C}$           | 1.0    | 1.0    | 1.0    | 1.0    | A                  |
| Peak forward surge current                              | $I_{FSM}$       | $t_p = 8.3 \text{ ms}$ , half sine | 30     | 30     | 30     | 30     | A                  |
| Maximum instantaneous forward voltage drop              | $V_F$           | $I_F = 1.0 \text{ A}$              | 1.1    | 1.1    | 1.1    | 1.1    | V                  |
| Maximum DC reverse current at rated DC blocking voltage | $I_R$           | $T_a = 25^\circ\text{C}$           | 5      | 5      | 5      | 5      | $\mu\text{A}$      |
|                                                         |                 | $T_a = 125^\circ\text{C}$          | 500    | 500    | 500    | 500    |                    |
| Typical junction capacitance                            | $C_j$           |                                    | 25     | 25     | 25     | 25     | pF                 |
| Typical thermal resistance                              | $R_{\theta JC}$ |                                    | 20     | 20     | 20     | 20     | $^\circ\text{C/W}$ |



## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



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