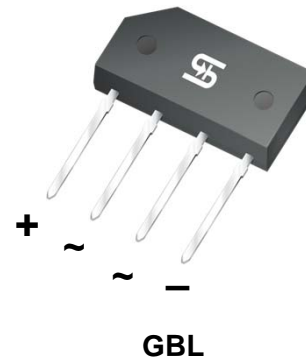


## 2A, 50V - 800V Glass Passivated Single-Phase Bridge Rectifiers

### FEATURES

- Ideal for printed circuit board
- High case dielectric strength
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



### MECHANICAL DATA

**Case:** GBL

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free)

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

**Polarity:** As marked

**Weight:** 2 g (approximately)

| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted) |                    |              |         |         |         |         |         |                  |
|--|--------------------|--------------|---------|---------|---------|---------|---------|------------------|
| PARAMETER  | SYMBOL             | D2SB 05      | D2SB 10 | D2SB 20 | D2SB 40 | D2SB 60 | D2SB 80 | UNIT             |
| Maximum repetitive peak reverse voltage  | V <sub>RRM</sub>   | 50           | 100     | 200     | 400     | 600     | 800     | V                |
| Maximum RMS voltage  | V <sub>RMS</sub>   | 35           | 70      | 140     | 280     | 420     | 560     | V                |
| Maximum DC blocking voltage  | V <sub>DC</sub>    | 50           | 100     | 200     | 400     | 600     | 800     | V                |
| Maximum average forward rectified current  | I <sub>F(AV)</sub> | 2            |         |         |         |         |         | A                |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load          | I <sub>FSM</sub>   | 80           |         |         |         |         |         | A                |
| Rating of fusing ( t<8.3ms)  | I <sup>2</sup> t   | 26           |         |         |         |         |         | A <sup>2</sup> s |
| Maximum instantaneous forward voltage (Note 1)<br>I <sub>F</sub> = 2 A                       | V <sub>F</sub>     | 1.1          |         |         |         |         |         | V                |
| Maximum reverse current @ rated V <sub>R</sub>   | I <sub>R</sub>     | 10           |         |         |         |         |         | μA               |
|  |                    | 500          |         |         |         |         |         |                  |
| Typical thermal resistance   | R <sub>θJL</sub>   | 10           |         |         |         |         |         | °C/W             |
|  | R <sub>θJA</sub>   | 47           |         |         |         |         |         |                  |
| Operating junction temperature range   | T <sub>J</sub>     | - 55 to +150 |         |         |         |         |         | °C               |
| Storage temperature range  | T <sub>STG</sub>   | - 55 to +150 |         |         |         |         |         | °C               |

Note 1: Pulse test with PW=300μs, 1% duty cycle

**ORDERING INFORMATION**

| PART NO.           | PART NO. SUFFIX | PACKING CODE | PACKING CODE SUFFIX (*) | PACKAGE | PACKING             |
|--------------------|-----------------|--------------|-------------------------|---------|---------------------|
| D2SBxx<br>(Note 1) | H               | C2           | G                       | GBL     | 25 / Tube           |
|                    |                 | X0           |                         | GBL     | 25 / Tube / Forming |
|                    |                 | D2           |                         | GBL     | 25 / Tube           |

Note 1: "xx" defines voltage from 50V (D2SB05) to 800V (D2SB80)

\*: Optional available

**EXAMPLE**

| PREFERRED P/N | PART NO. | PART NO. SUFFIX | PACKING CODE | PACKING CODE SUFFIX | DESCRIPTION                          |
|---------------|----------|-----------------|--------------|---------------------|--------------------------------------|
| D2SB80HC2G    | D2SB80   | H               | C2           | G                   | AEC-Q101 qualified<br>Green compound |

**RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE



FIG. 2 TYPICAL REVERSE CHARACTERISTICS

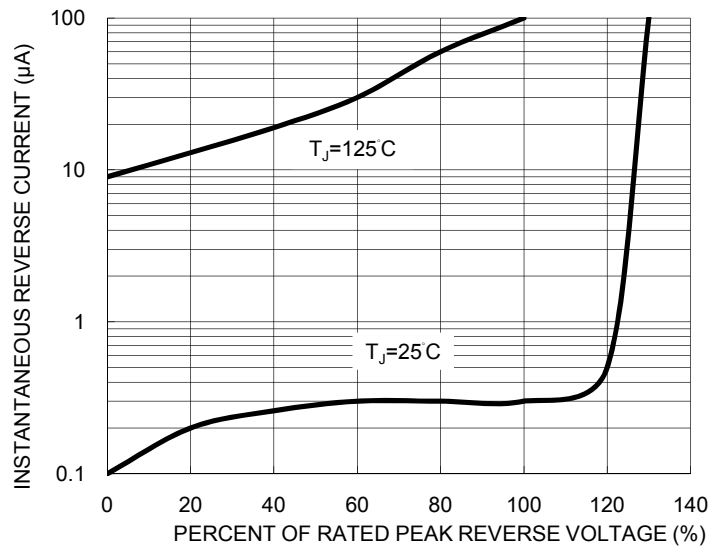


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



FIG. 4 TYPICAL FORWARD CHARACTERISTICS



FIG. 5 TYPICAL JUNCTION CAPACITANCE



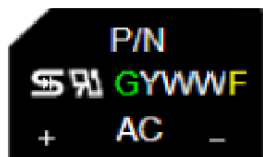
PACKAGE OUTLINE DIMENSIONS

**GBL**



| DIM. | Unit (mm) |       | Unit (inch) |       |
|------|-----------|-------|-------------|-------|
|      | Min       | Max   | Min         | Max   |
| A    | 19.70     | 20.30 | 0.776       | 0.799 |
| B    | 2.30      | 2.70  | 0.091       | 0.106 |
| C    | 1.30      | 2.00  | 0.051       | 0.079 |
| D    | 0.90      | 1.10  | 0.035       | 0.043 |
| E    | 4.80      | 5.20  | 0.189       | 0.205 |
| F    | 10.70     | 11.30 | 0.421       | 0.445 |
| G    | 2.30      | 2.70  | 0.091       | 0.106 |
| H    | 13.00     | 14.00 | 0.512       | 0.551 |
| I    | 3.30      | 3.70  | 0.130       | 0.146 |
| J    | 0.80      | 1.20  | 0.031       | 0.047 |
| K    | 0.40      | 0.60  | 0.016       | 0.024 |

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code

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- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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