**DABS2100**

**2A**
**SCHOTTKY BRIDGE RECTIFIER**
**ABS**

## Product Summary (@$T_A$ = +25°C)

| $V_{RRM}$ (V) | $I_O$ (A) | $V_F$ Max (V) | $I_R$ Max (µA) |
|---|---|---|---|
| 100 | 2 | 0.85 | 50 |

## Features and Benefits

- Rating to 100V PRV
- Ideal for Printed Circuit Board
- Reliable Low Cost Construction Utilizing Molded Plastic Technique
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**
- **For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/104/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please contact us or your local Diodes representative. https://www.diodes.com/quality/product-definitions/**

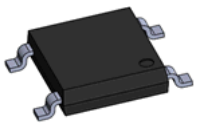
## Application

- Energy saving lamps
- Mobile battery chargers

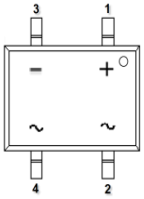
## Mechanical Data

- Package: ABS
- Package Material: Molded Plastic, "Green" Molding Compound; UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Lead-Free Plating (Matte Tin Finish), Solderable per MIL-STD-202, Method 208 e3
- Polarity: As Marked on Body
- Weight: 0.098 grams (Approximate)

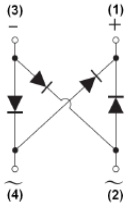
ABS



Top View




Pin Diagram




Device Symbol

## Ordering Information (Note 4)

| Part Number | Package | Packing | |
|---|---|---|---|
| | | Qty. | Carrier |
| DABS2100-13 | ABS | 3,000 | Tape & Reel |

Notes:
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. For packaging details, go to our website at https://www.diodes.com/design/support/packaging/diodes-packaging/.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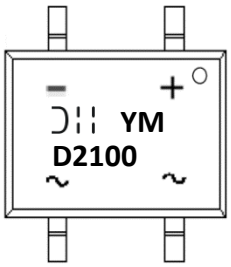
## Marking Information

ABS




= Manufacturer's Code Marking
D2100 = Product Type Marking Code
YM = Date Code Marking
Y = Year (ex: K = 2023)
M = Month (ex: 5 = May)

Date Code Key

| Year | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Code | K | L | M | N | P | R | S | T | U | V | W | X |

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | O | N | D |

## Maximum Ratings (@$T_A$ = +25°C, unless otherwise specified.)

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

| Characteristic | Symbol | Value | Unit |
|---|---|---|---|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_{RM}$ | 100 | V |
| Average Rectified Output Current | $I_O$ | 2 | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms<br>Single Half Sine Wave Superimposed on Rated Load | $I_{FSM}$ | 50 | A |

## Thermal Characteristics

| Characteristic | Symbol | Value | Unit |
|---|---|---|---|
| Typical Thermal Resistance Junction to Ambient (Note 5) | $R_{\theta JA}$ | 75 | °C/W |
| Typical Thermal Resistance Junction to Case (Note 5) | $R_{\theta JC}$ | 13 | °C/W |
| Operating and Storage Temperature Range | $T_J$, $T_{STG}$ | -55 to +150 | °C |

Note: 5. The unit mounted on glass-epoxy substrate with 1oz/ft2_2mm x 2mm copper pad.

## Electrical Characteristics (@$T_A$ = +25°C, unless otherwise specified.)

| Characteristic | Symbol | Typ | Max | Unit | Test Condition |
|---|---|---|---|---|---|
| Forward Voltage Drop (Note 6) | $V_F$ | —<br>0.70 | 0.85<br>— | V | $I_F$ = 2A, $T_J$ = +25°C<br>$I_F$ = 2A, $T_J$ = +125°C |
| Leakage Current (Note 6) | $I_R$ | —<br>— | 50<br>5.0 | µA<br>mA | $V_R$ = 100V, $T_J$ = +25°C<br>$V_R$ = 100V, $T_J$ = +100°C |
| Total Capacitance | $C_T$ | 75 | — | pF | $V_R$ = 4V, f = 1MHz |

Note: 6. Short duration pulse test used to minimize self-heating effect.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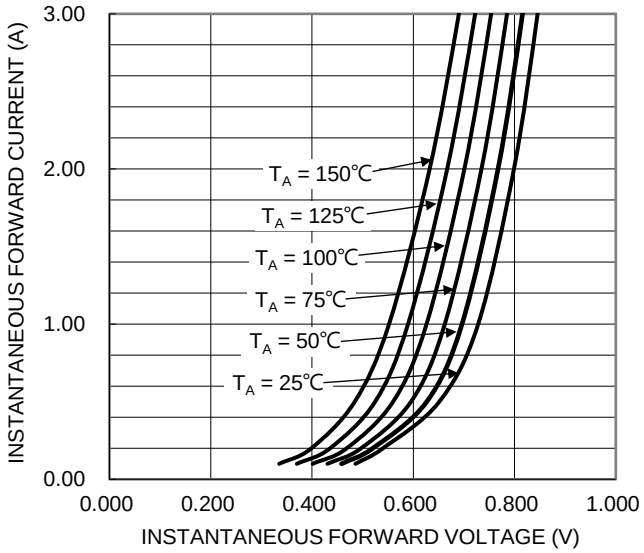


Figure 1. Typical Forward Characteristics

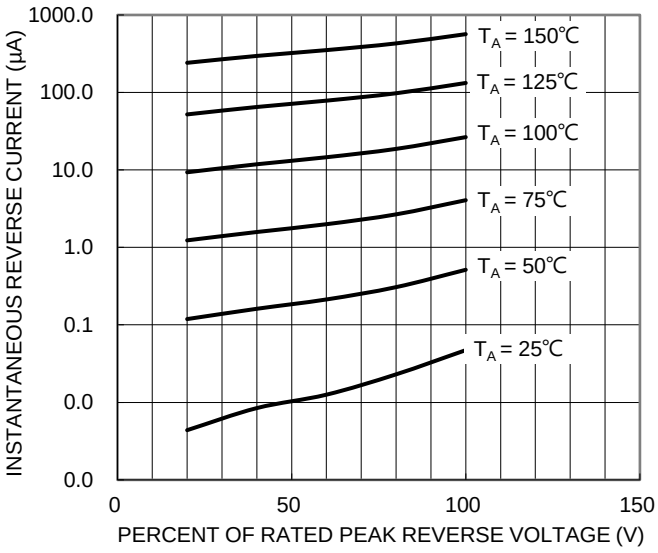


Figure 2. Typical Reverse Characteristics

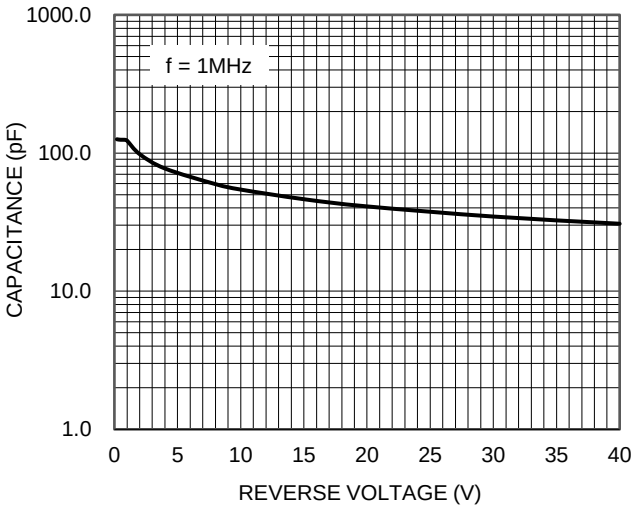


Figure 3. Typical Junction Capacitance


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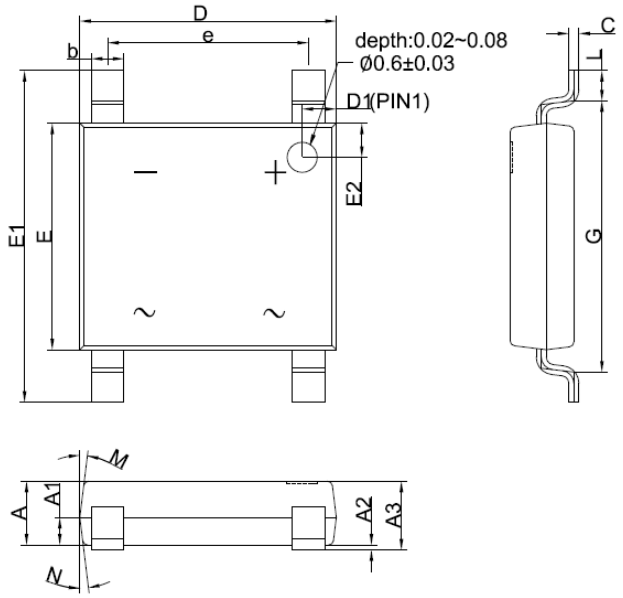
## Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

**ABS**

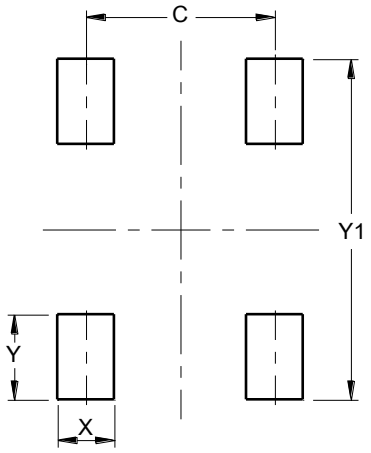



| ABS | | |
|---|---|---|
| **DIM** | **MIN** | **MAX** |
| **A** | 1.20 | 1.30 |
| **A1** | 0.43 | 0.63 |
| **A2** | 0.00 | 0.15 |
| **A3** | 1.20 | 1.40 |
| **b** | 0.50 | 0.80 |
| **C** | 0.10 | 0.30 |
| **D** | 4.85 | 5.25 |
| **D1** | 0.45 | 0.85 |
| **e** | 3.80 | 4.20 |
| **E** | 4.25 | 4.65 |
| **E1** | 6.40 | 6.80 |
| **E2** | 0.45 | 0.85 |
| **G** | 5.20 | 5.60 |
| **L** | 0.40 | 0.80 |
| **M** | 7° TYP | |
| **N** | 7° TYP | |
| **All Dimensions in millimeters** | | |

## Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

**ABS**




| Dimensions | Value (in mm) |
|---|---|
| **C** | 4.00 |
| **X** | 1.20 |
| **Y** | 1.80 |
| **Y1** | 7.20 |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