# **DB2U308**

# Silicon epitaxial planar type

For high speed switching circuits DB27308 in USSMini2 type package

### ■ Features

- Low forward voltage V<sub>F</sub>
- Short reverse recovery time t<sub>rr</sub>
- Halogen-free / RoHS compliant
   (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

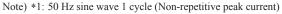
## ■ Marking Symbol: 11

## Packaging

DB2U30800L Embossed type (Thermo-compression sealing): 10 000 pcs / reel (standard)

## ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter                                    | Symbol             | Rating      | Unit |  |
|--|--------------------|-------------|------|--|
| Reverse voltage                              | V <sub>R</sub>     | 30          | V    |  |
| Repetitive peak reverse voltage              | V <sub>RRM</sub>   | 30          | V    |  |
| Forward current (Average)                    | I <sub>F(AV)</sub> | 100         | mA   |  |
| Peak forward current                         | $I_{FM}$           | 200         | mA   |  |
| Non-repetitive peak forward surge current *1 | $I_{FSM}$          | 1           | A    |  |
| Junction temperature                         | T <sub>j</sub>     | 125         | °C   |  |
| Operating ambient temperature                | T <sub>opr</sub>   | -40 to +85  | °C   |  |
| Storage temperature                          | T <sub>stg</sub>   | -55 to +125 | °C   |  |

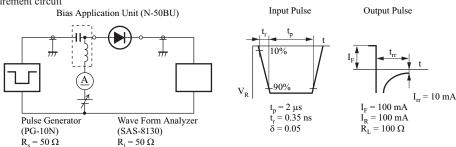


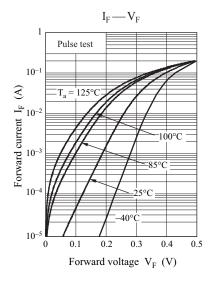
# Unit: mm 0. 6 0. 13 0. 2 0. 2 0. 38 1: Cathode 2: Anode Panasonic USSMini2-F2-B JEITA SC-116A Code SOD-923

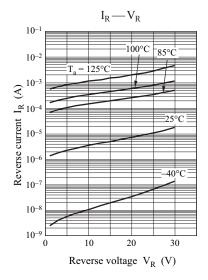
# ■ Electrical Characteristics $T_a = 25$ °C±3°C

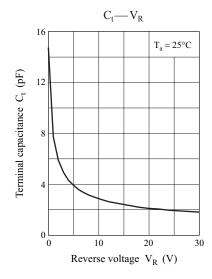
| Parameter                | Symbol          | Conditions   | Min | Тур | Max  | Unit |
|--------------------------|-----------------|--|-----|-----|------|------|
| Forward voltage          | $V_{F1}$        | $I_F = 10 \text{ mA}$  |     |     | 0.29 | V    |
|                          | $V_{F2}$        | $I_F = 100 \text{ mA}$   |     |     | 0.42 |      |
| Reverse current          | $I_{R1}$        | $V_R = 10 \text{ V}$   |     |     | 25   | μА   |
|                          | I <sub>R2</sub> | $V_R = 30 \text{ V}$   |     |     | 120  |      |
| Terminal capacitance     | C <sub>t</sub>  | $V_R = 10 \text{ V}, f = 1 \text{ MHz}$                                |     | 2.9 |      | pF   |
| Reverse recovery time *1 | t <sub>rr</sub> | $I_F = I_R = 100 \text{ mA}, I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$ |     | 1.3 |      | ns   |

- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
  - 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
  - 3. Absolute frequency of input and output is 250 MHz
    - \*1: t<sub>rr</sub> measurement circuit





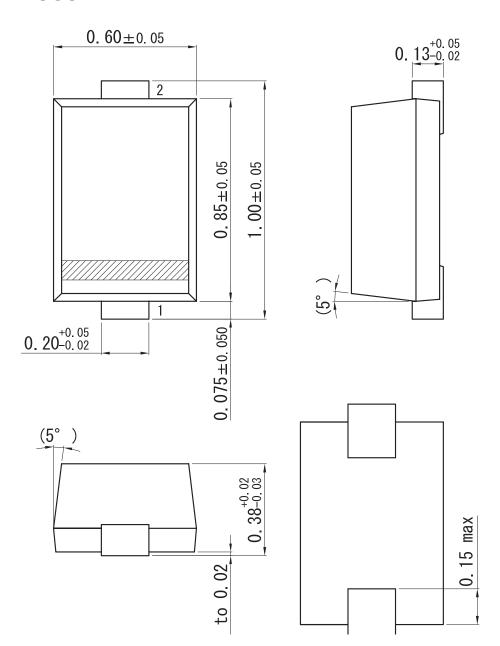




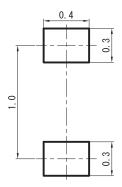
Ver. CED 2

# USSMini2-F2-B

Unit: mm



## ■ Land Pattern (Reference) (Unit: mm)



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