

DB4X501K

Silicon epitaxial planar type

For high speed switching circuits
DB2J501 in Mini4 type package

■ Features

- Short reverse recovery time t_{rr}
- Low terminal capacitance C_t
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: 4H

■ Basic Part Number

Dual DB2J501 (Parallel)

■ Packaging

DB4X501K0R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|--|-----------|-------------|------------------|
| Reverse voltage | V_R | 50 | V |
| Repetitive peak reverse voltage | V_{RM} | 50 | V |
| Forward current (Average) | Single | 200 | mA |
| | Double *1 | | |
| Peak forward current | Single | 300 | mA |
| | Double *1 | | |
| Non-repetitive peak forward surge current *2 | Single | 1 | A |
| | Double *1 | | |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

Note) *1: Value of each diode in double diodes used.

*2: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

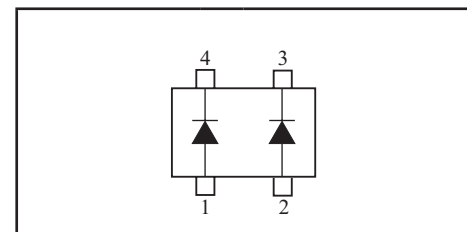
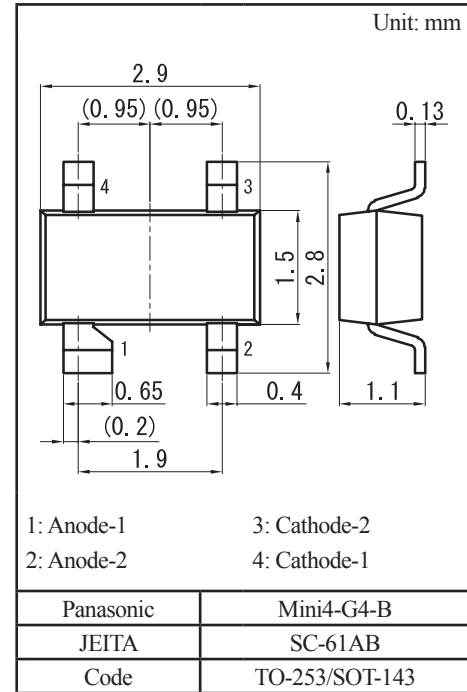
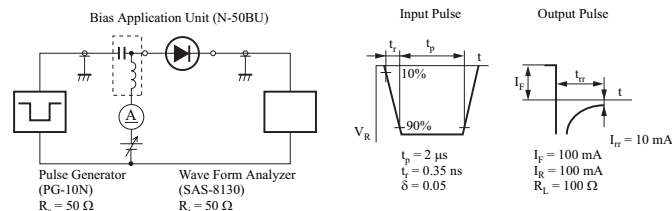
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|--|-----|-----|------|---------------|
| Forward voltage | V_{F1} | $I_F = 30 \text{ mA}$ | | | 0.36 | V |
| | V_{F2} | $I_F = 200 \text{ mA}$ | | | 0.55 | |
| Reverse current | I_R | $V_R = 50 \text{ V}$ | | | 200 | μA |
| Terminal capacitance | C_t | $V_R = 10 \text{ V}, f = 1 \text{ MHz}$ | | 4 | | pF |
| Reverse recovery time * | t_{rr} | $I_F = I_R = 100 \text{ mA}, I_{tr} = 10 \text{ mA}, R_L = 100 \Omega$ | | 1.6 | | ns |

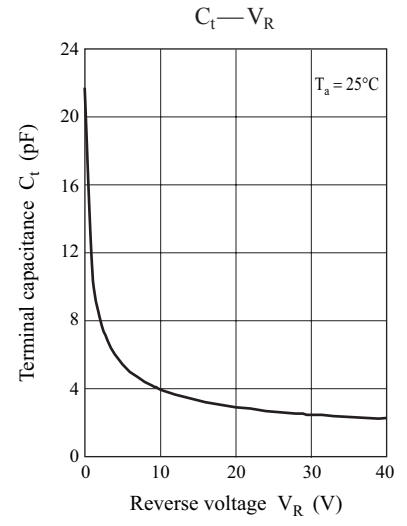
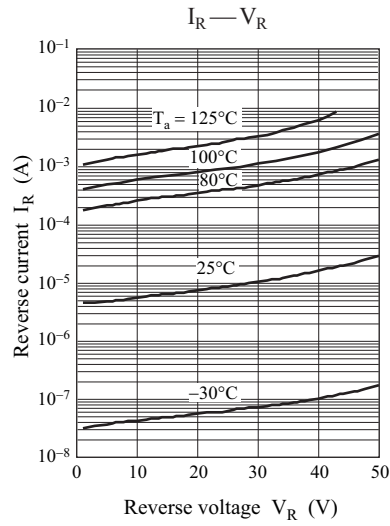
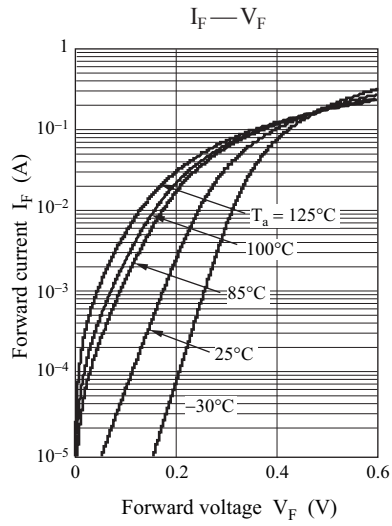
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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 1 GHz

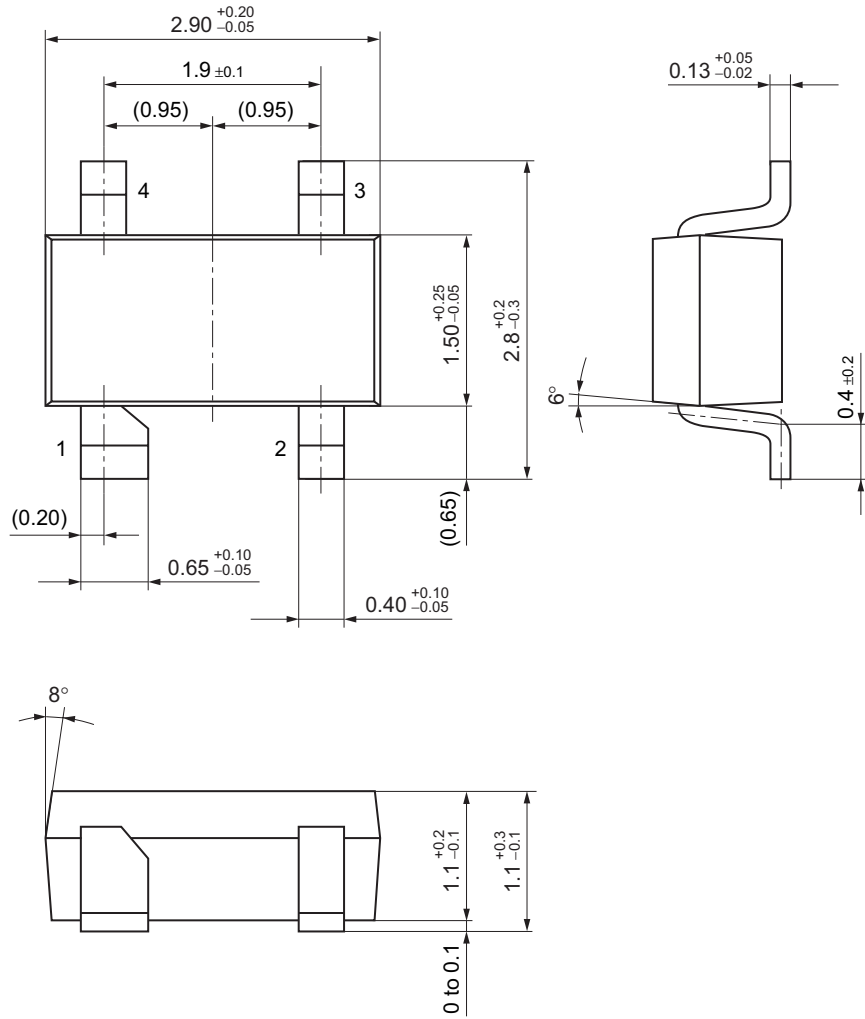
4. *: t_{rr} measurement circuit



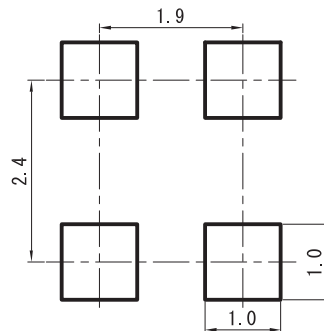


Mini4-G4-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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