

DB3X407K

Silicon epitaxial planar type

For high frequency rectification

■ Features

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

■ Marking Symbol: 3J

■ Packaging

DB3X407K0L 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 | 40 | V |
| Maximum peak reverse voltage | V_{RM} | 40 | V |
| Forward current (Average) | $I_{F(AV)}$ | 500 | mA |
| Non-repetitive peak forward surge current *1 | I_{FSM} | 2 | A |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Operating ambient temperature | T_{opr} | -40 to +85 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

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

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

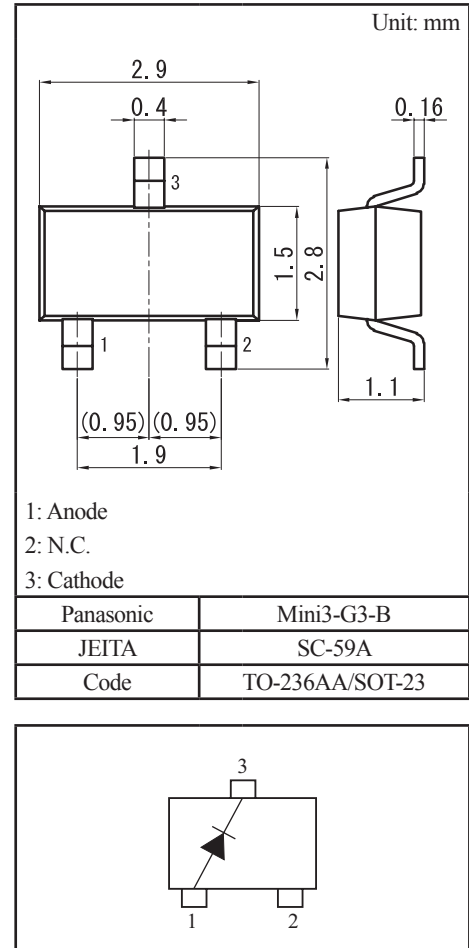
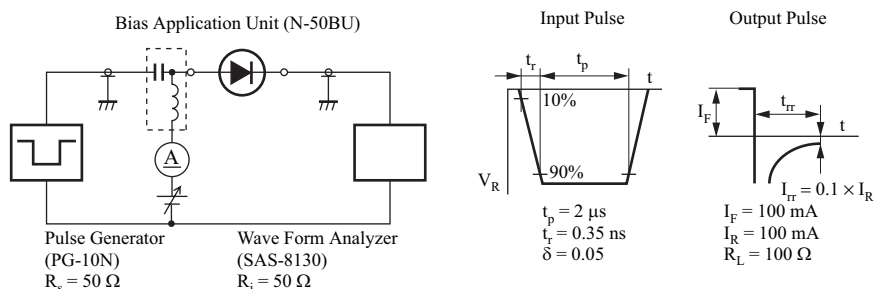
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|--------------------------|----------|--|-----|------|------|---------------|
| Forward voltage | V_F | $I_F = 500 \text{ mA}$ | | | 0.55 | V |
| Reverse current | I_R | $V_R = 35 \text{ V}$ | | | 100 | μA |
| Terminal capacitance | C_t | $V_R = 10 \text{ V}, f = 1 \text{ MHz}$ | | 10.5 | | pF |
| Reverse recovery time *1 | t_{rr} | $I_F = I_R = 100 \text{ mA}, I_{rr} = 0.1 \times I_R,$ $R_L = 100 \Omega$ | | 3.6 | | ns |

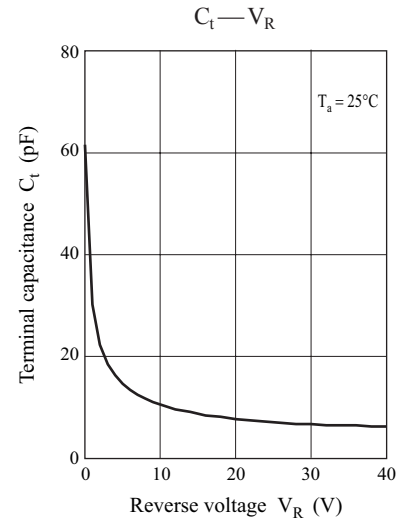
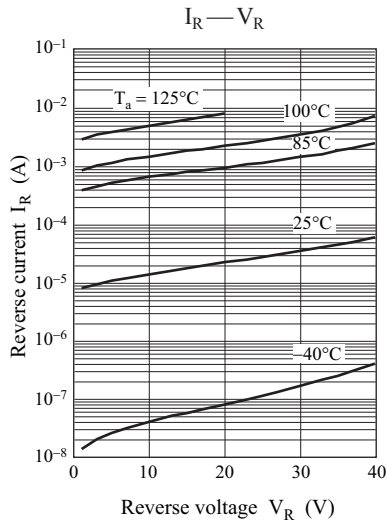
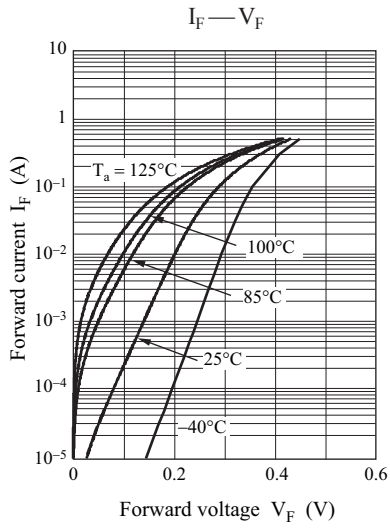
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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 400 MHz

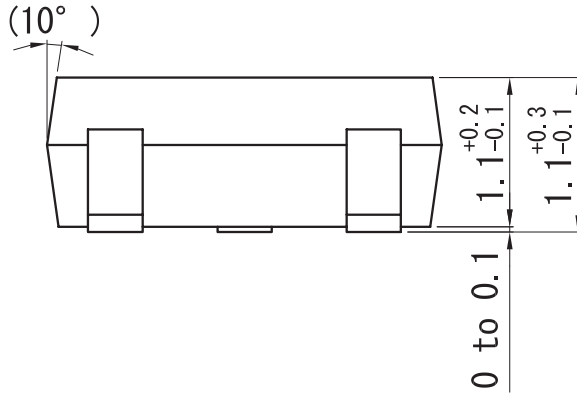
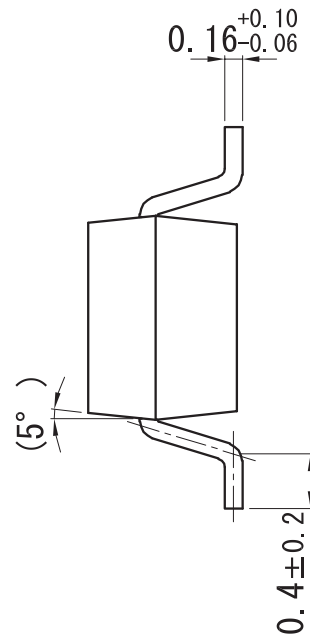
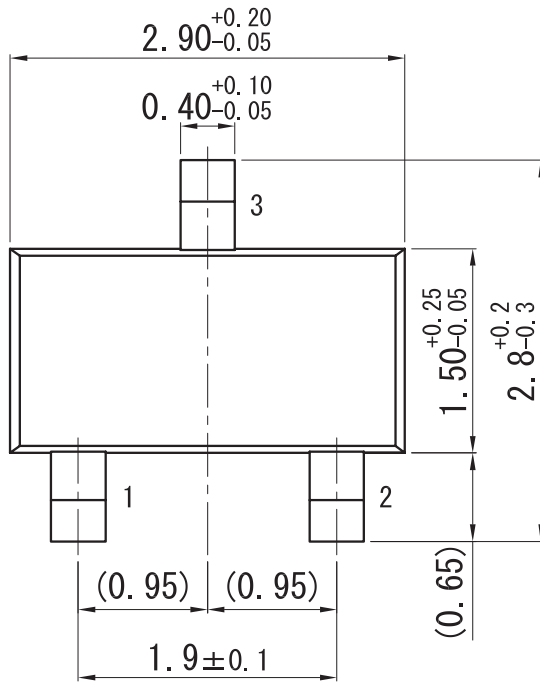
*1: t_{rr} measurement circuit



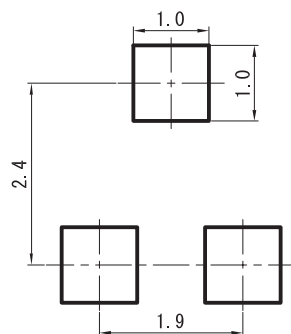


Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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