

DB3J315E

Silicon epitaxial planar type

For high speed switching circuits
DB3J315E in SMini3 type package

■ Features

- Short reverse recovery time t_{rr}
- Small reverse current I_R
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: 5D

■ Packaging

DB3J315E0L 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 | 30 | V |
| Maximum peak reverse voltage | V_{RM} | 30 | V |
| Forward current | Single | 30 | mA |
| | Double *1 | 20 | |
| Peak forward current | Single | 150 | mA |
| | Double *1 | 110 | |
| 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: Value of each diode in double diodes used.

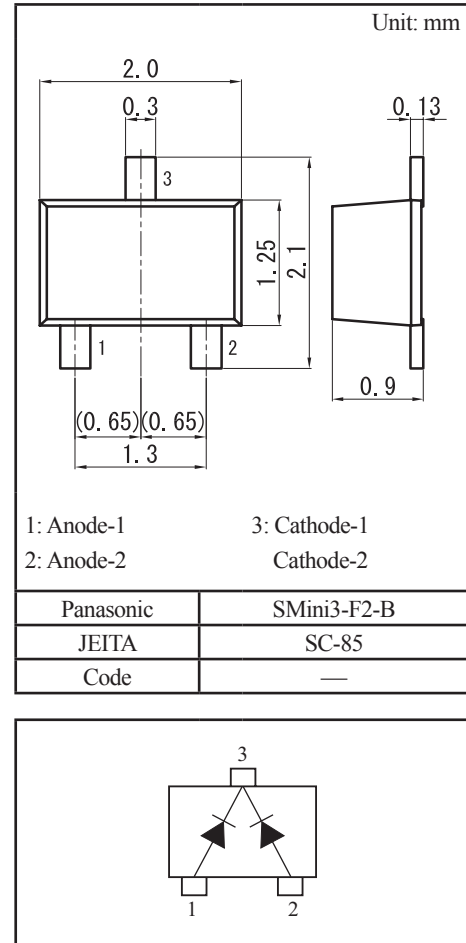
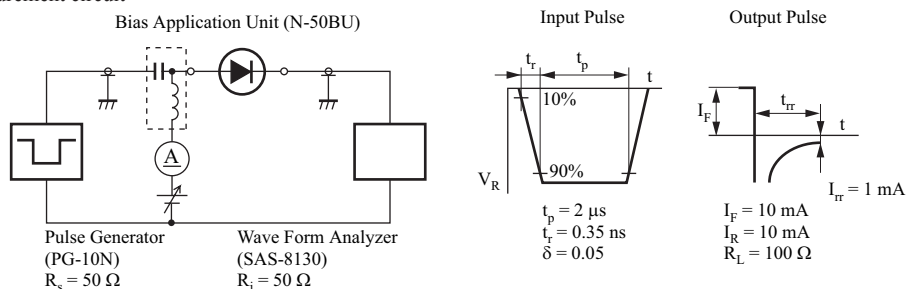
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

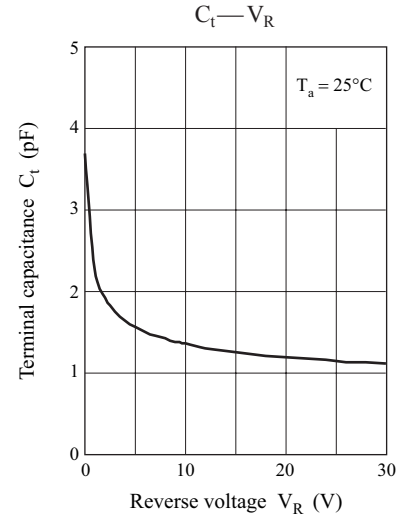
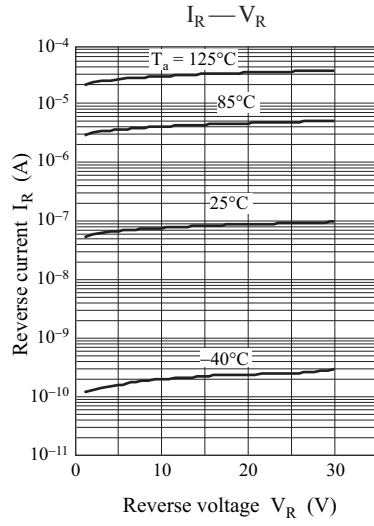
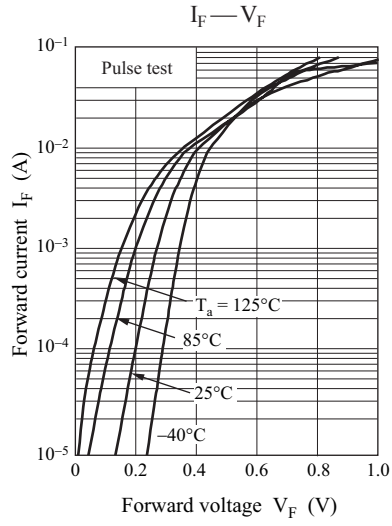
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|--------------------------|----------|--|-----|-----|-----|------|
| Forward voltage | V_{F1} | $I_F = 1 \text{ mA}$ | | | 0.4 | V |
| | V_{F2} | $I_F = 30 \text{ mA}$ | | | 1.0 | |
| Reverse current | I_R | $V_R = 30 \text{ V}$ | | | 300 | nA |
| Terminal capacitance | C_t | $V_R = 10 \text{ V}, f = 1 \text{ MHz}$ | | 1.4 | | pF |
| Reverse recovery time *1 | t_{rr} | $I_F = I_R = 10 \text{ mA}, I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$ | | 1.0 | | 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 2 GHz

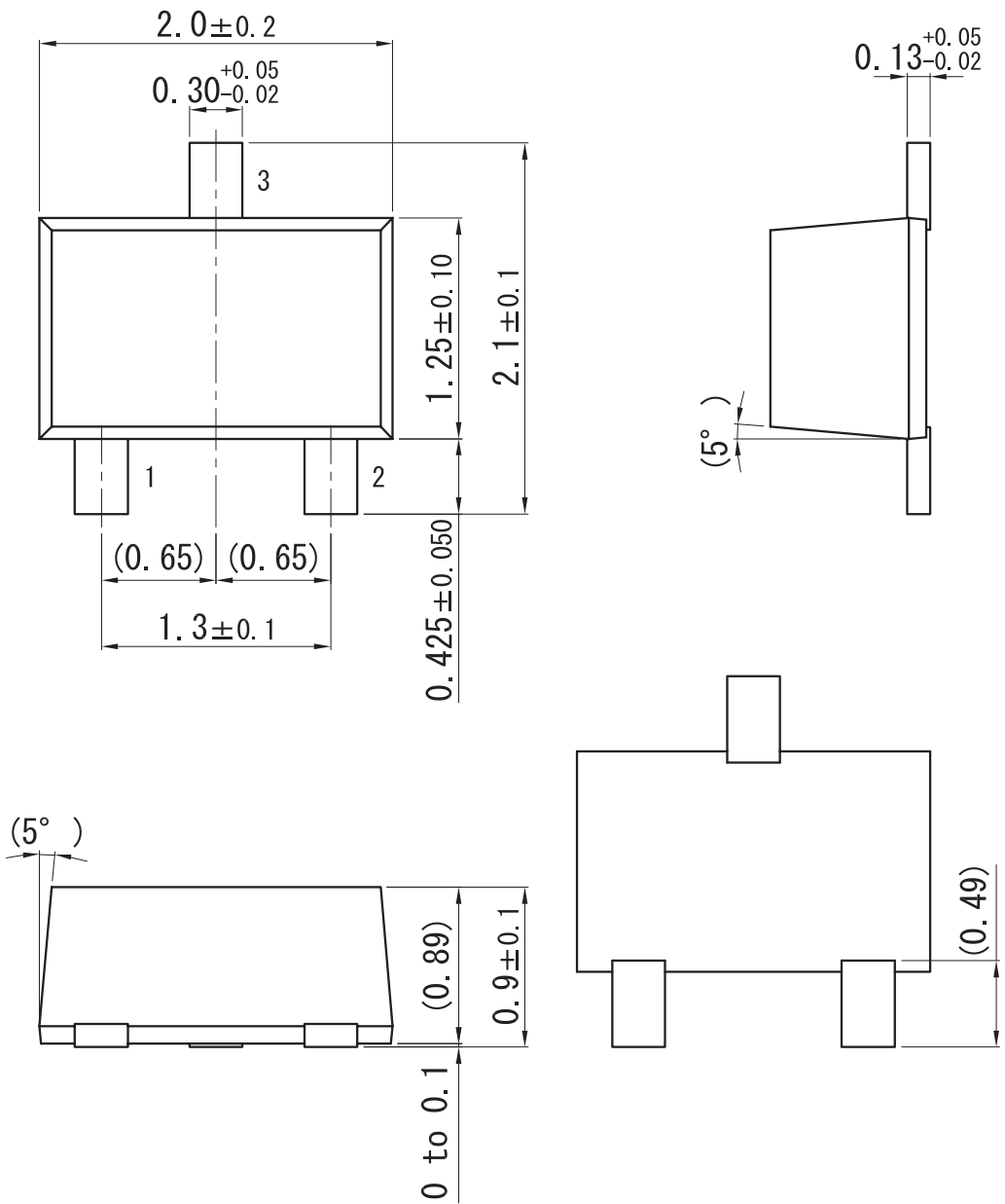
*1: t_{rr} measurement circuit



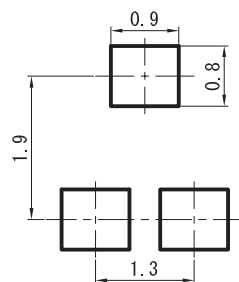


SMini3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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