

# DB3S315E

## Silicon epitaxial planar type

For high speed switching circuits  
DB3J315E in SSMini3 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

DB3S315E0L 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    | $I_F$       | mA               |
|                               | Double *1 |             |                  |
| Peak forward current          | Single    | $I_{FM}$    | mA               |
|                               | Double *1 |             |                  |
| 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.

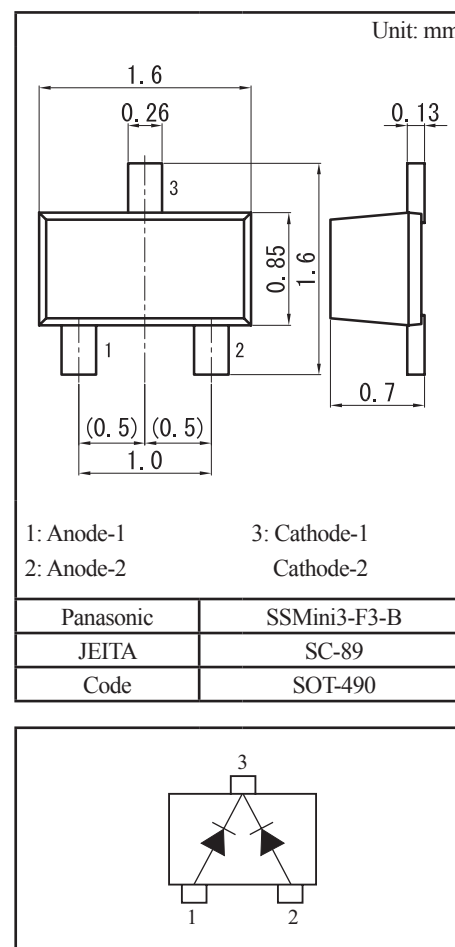
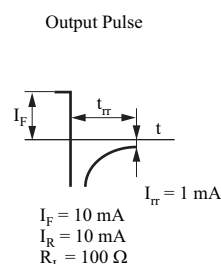
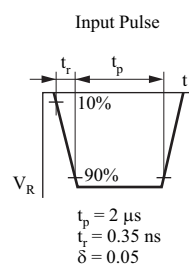
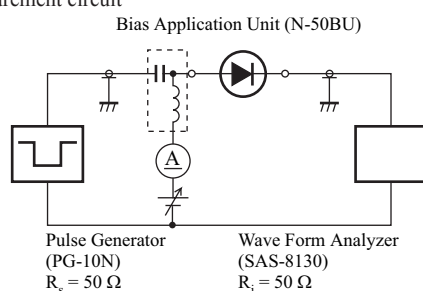
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

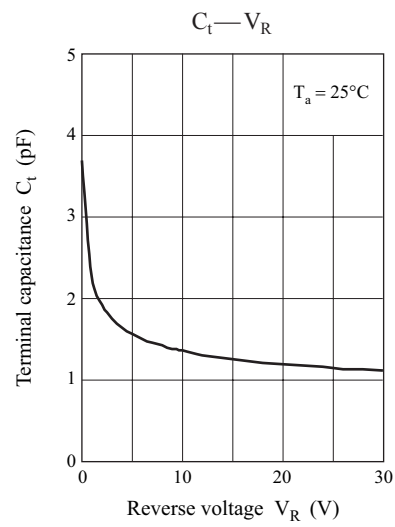
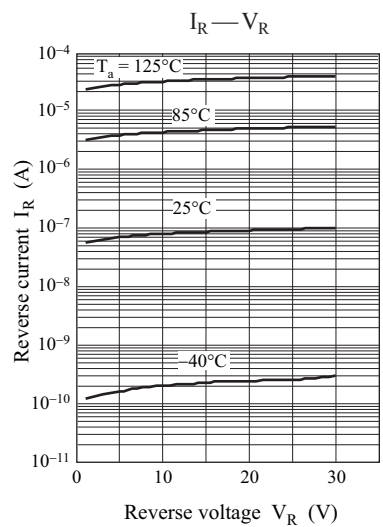
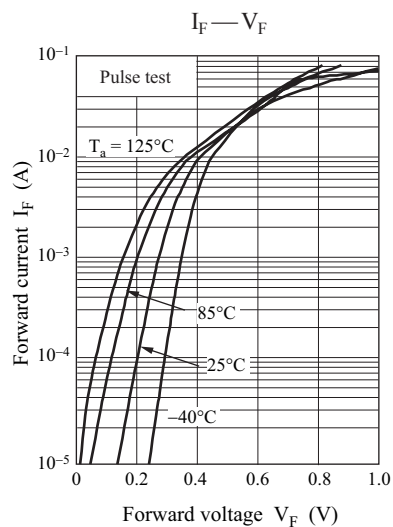
| Parameter                | Symbol   | Conditions                                                           | Min | Typ | Max | Unit |
|--------------------------|----------|----------------------------------------------------------------------|-----|-----|-----|------|
| Forward voltage          | $V_{F1}$ | $I_F = 1 \text{ mA}$                                                 |     |     | 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

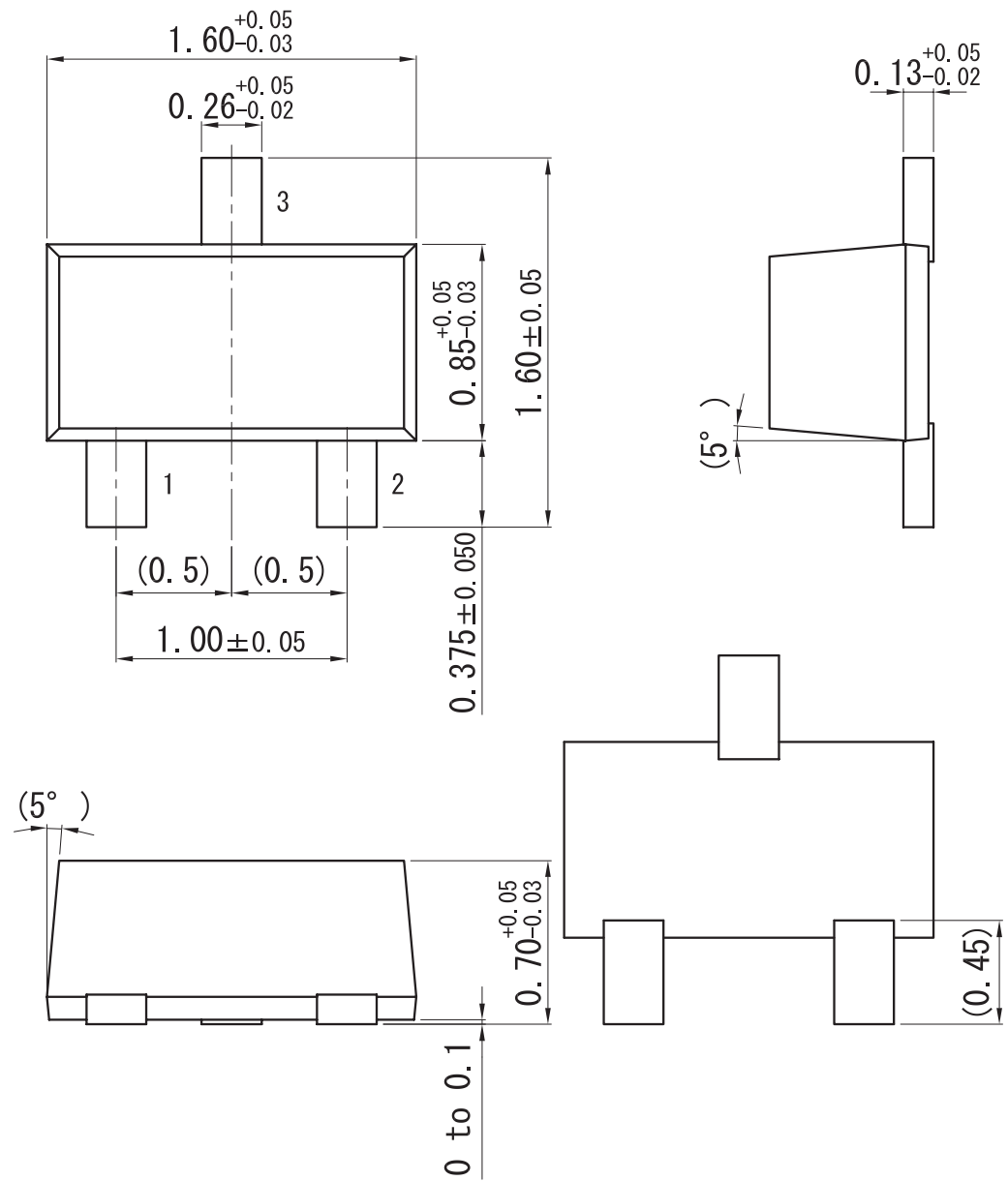
\*1:  $t_{rr}$  measurement circuit



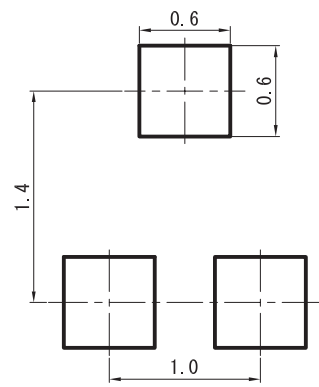


SSMini3-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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