

DB21413

Silicon epitaxial planar type

For rectification

■ Features

- Forward current (Average) $I_{F(AV)} = 2$ A rectification is possible
- Low forward voltage V_F and small reverse current I_R
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

■ Packaging

Embossed type (Thermo-compression sealing): 3000 pcs / reel (standard)

■ Package

- Code
SMini2-F4-B
- Pin Name
1: Cathode
2: Anode

■ Marking Symbol: 4N

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

| Parameter | Symbol | Rating | Unit |
|--|-------------|-------------|------------------|
| Reverse voltage | V_R | 40 | V |
| Forward current (Average) *1 | $I_{F(AV)}$ | 2 | A |
| Non-repetitive peak forward surge current *2 | I_{FSM} | 30 | A |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

Note) *1: Mounted on an alumina PC board (Board: 50 mm × 50 mm)

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

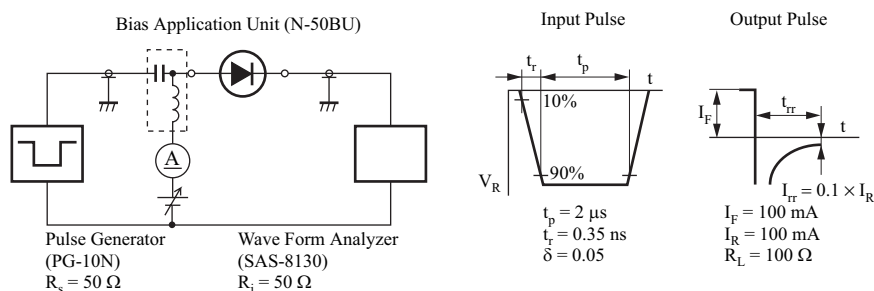
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

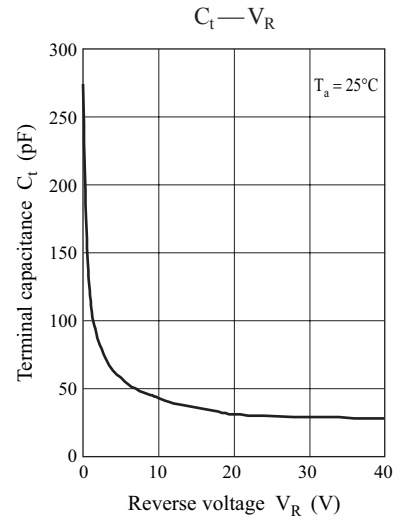
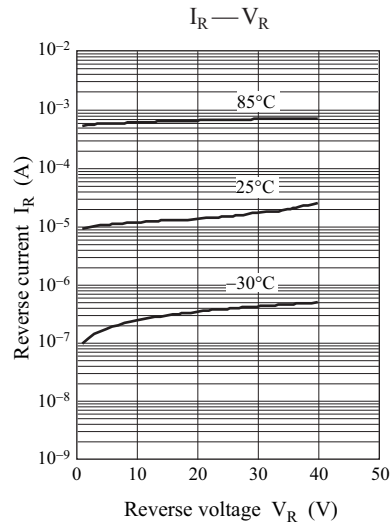
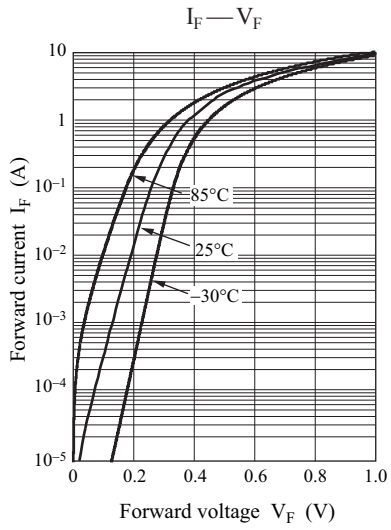
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|---|-----|------|------|---------------|
| Forward voltage | V_{F1} | $I_F = 2.0$ A | | 0.46 | 0.53 | V |
| Reverse current | I_R | $V_R = 40$ V | | 25 | 150 | μA |
| Terminal capacitance | C_t | $V_R = 10$ V, $f = 1$ MHz | | 43 | | pF |
| Reverse recovery time * | t_{rr} | $I_F = I_R = 100$ mA, $I_{tr} = 0.1 \times I_R$, $R_L = 100 \Omega$ | | 12 | | 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.

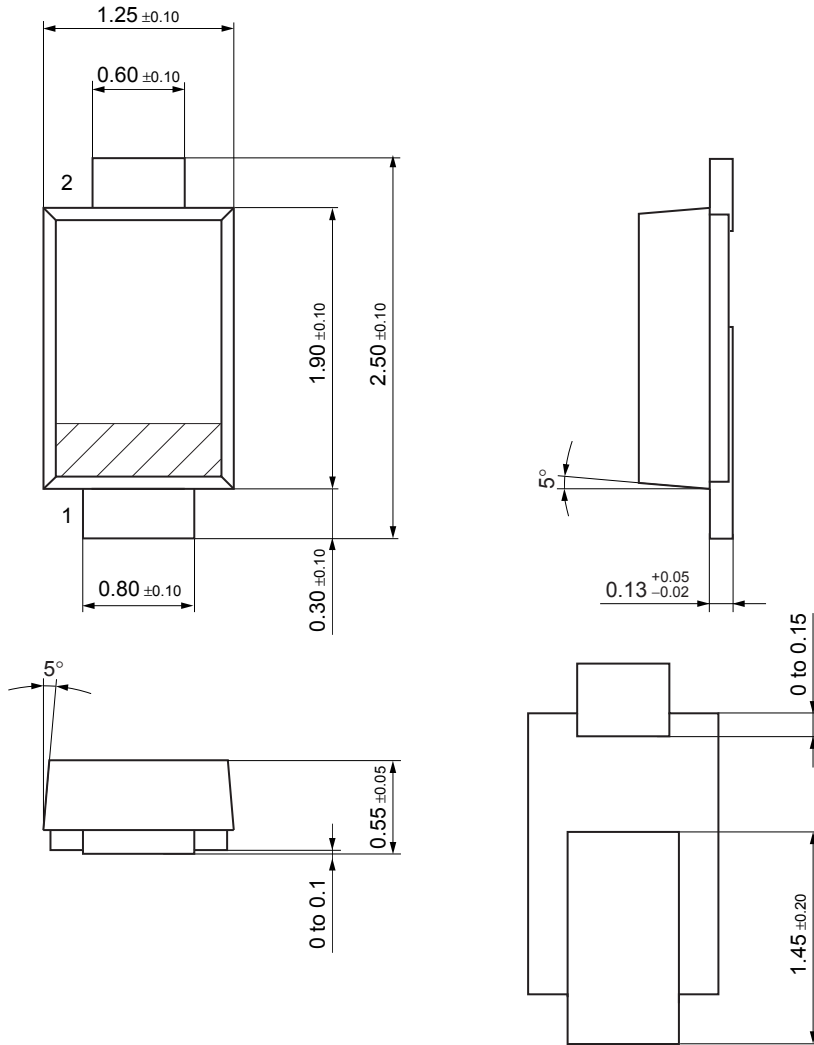
3. *: t_{rr} measurement circuit





SMini2-F4-B

Unit: mm



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