

# 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)

### ■ 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)

### ■ Package

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

### ■ Marking Symbol: 4N

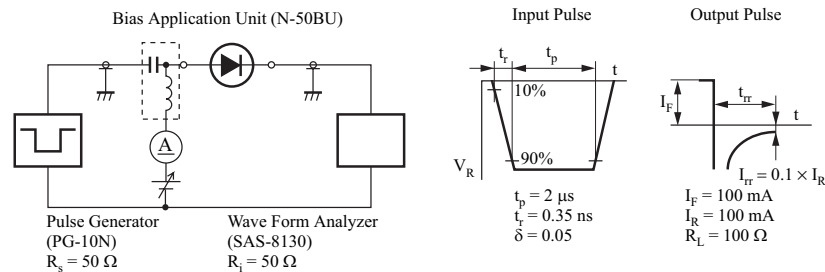
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

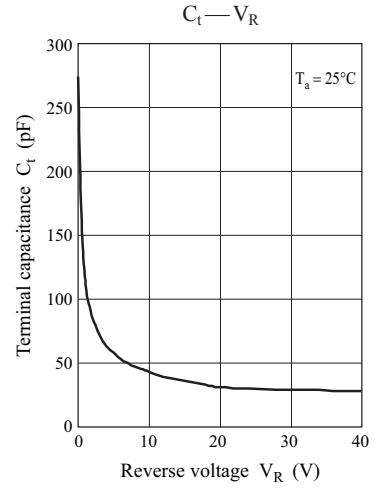
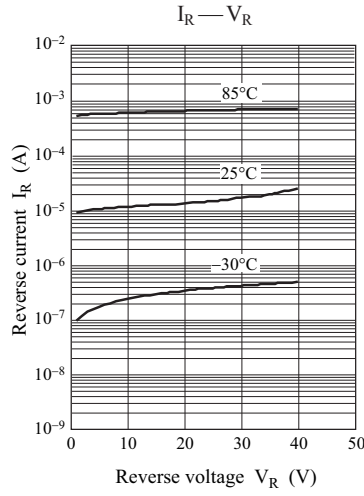
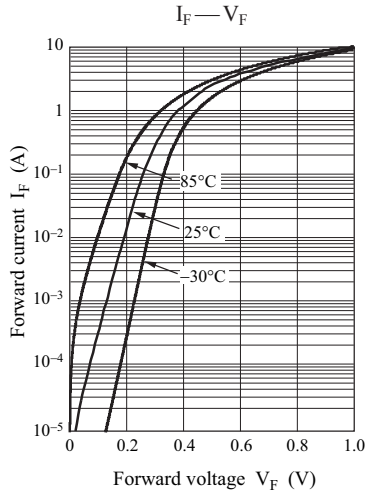
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 2.0$ A		0.46	0.53	V
Reverse current	$I_R$	$V_R = 40$ V		25	150	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 10$ V, $f = 1$ MHz		43		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA, $I_{rr} = 0.1 \times I_R$ , $R_L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

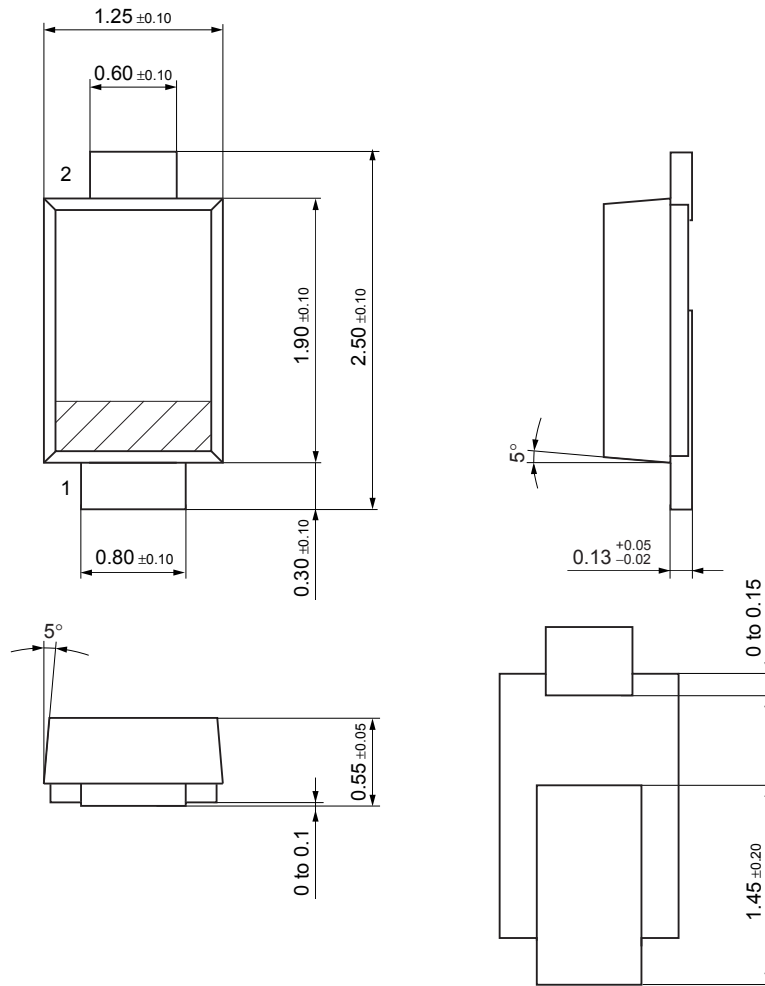
3. \*:  $t_{rr}$  measurement circuit





SMini2-F4-B

Unit: mm



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