

# DB2J501

## Silicon epitaxial planar type

For high speed switching circuits

### ■ Features

- Short reverse recovery time  $t_{rr}$
- Low terminal capacitance  $C_t$
- 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-F5-B
- Pin Name  
1: Cathode  
2: Anode

### ■ Marking Symbol: BC

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	50	V
Repetitive peak reverse voltage	$V_{RRM}$	50	V
Forward current (Average)	$I_{F(AV)}$	200	mA
Peak forward current	$I_{FM}$	300	mA
Non-repetitive peak forward surge current *	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

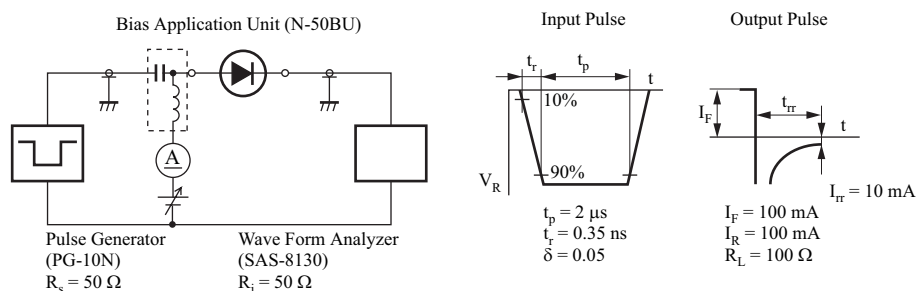
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

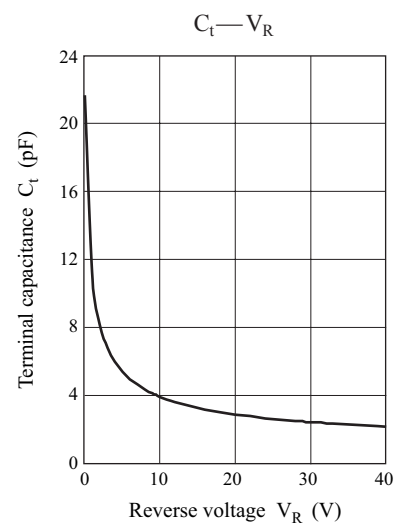
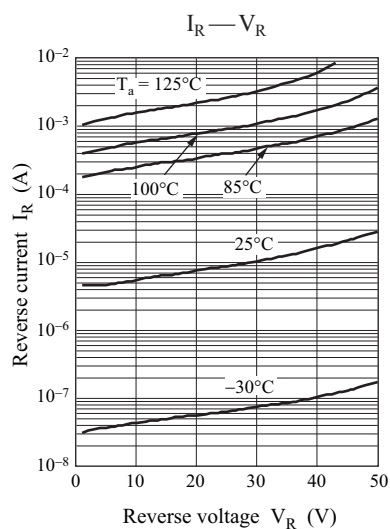
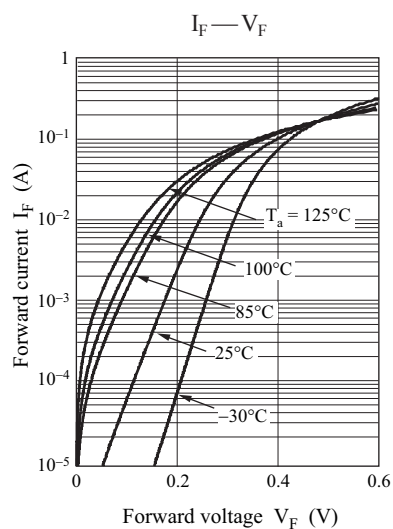
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 30 \text{ mA}$			0.36	V
	$V_{F2}$	$I_F = 200 \text{ mA}$			0.55	
Reverse current	$I_R$	$V_R = 50 \text{ V}$			200	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		4		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100 \text{ mA}, I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$		1.6		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 1 GHz

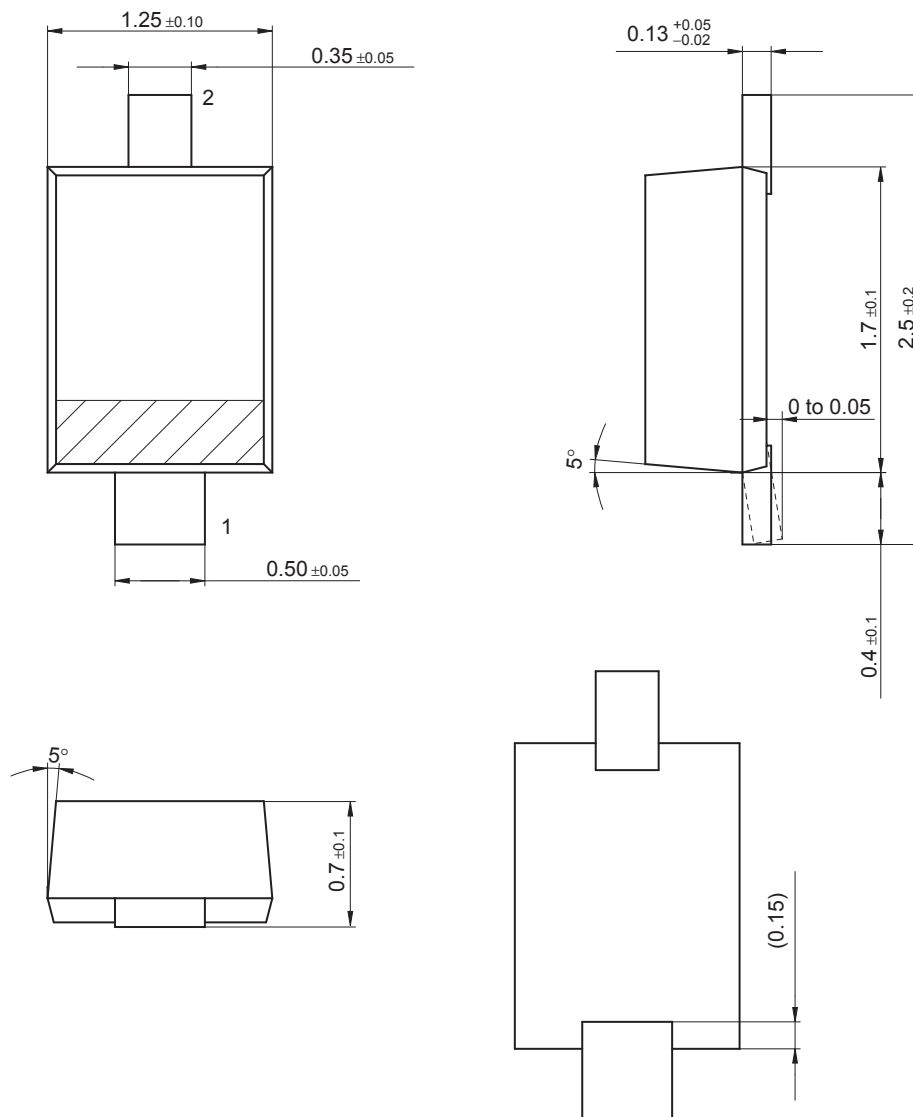
\*:  $t_{rr}$  measurement circuit





# SMini2-F5-B

Unit: mm



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