# **DB2J310**

## Silicon epitaxial planar type

For high speed switching circuits

#### ■ Features

- Short reverse recovery time t<sub>rr</sub>
- Low forward voltage V<sub>F</sub>
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

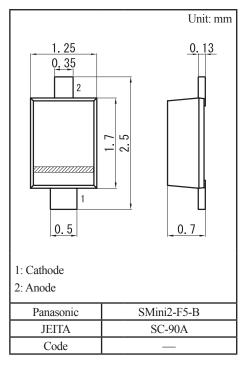
#### ■ Marking Symbol: B7

#### Packaging

DB2J31000L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Reverse voltage	V <sub>R</sub>	30	V	
Repetitive peak reverse voltage	V <sub>RRM</sub>	30	V	
Forward current (Average)	I <sub>F(AV)</sub>	I <sub>F(AV)</sub> 200		
Peak forward current	$I_{FM}$	300	mA	
Non-repetitive peak forward surge current *1	I <sub>FSM</sub>	1	A	
Junction temperature	$T_j$	125	°C	
Operating ambient temperature	T <sub>opr</sub>	-40 to +85	°C	
Storage temperature	T <sub>stg</sub>	-55 to +125	°C	

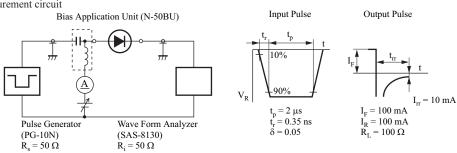


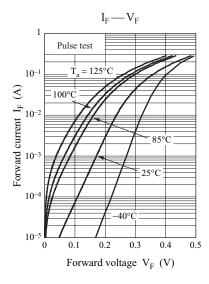
Note) \*1: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

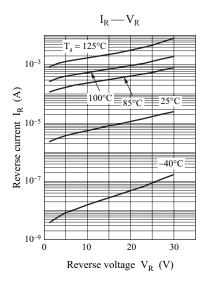
#### ■ Electrical Characteristics $T_a = 25$ °C±3°C

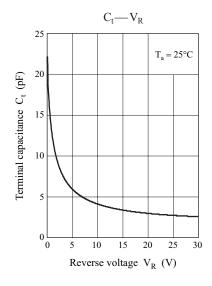
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 5 \text{ mA}$			0.27	V
	$V_{F2}$	$I_F = 100 \text{ mA}$			0.40	
	$V_{F3}$	$I_F = 200 \text{ mA}$			0.47	
Reverse current —	$I_{R1}$	$V_R = 10 \text{ V}$			20	μΑ
	I <sub>R2</sub>	$V_R = 30 \text{ V}$			200	
Terminal capacitance	C <sub>t</sub>	$V_R = 10 \text{ V, } f = 1 \text{ MHz}$		4.5		pF
Reverse recovery time *1	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}, I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$		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 250 MHz
    - $*1: t_{rr}$  measurement circuit





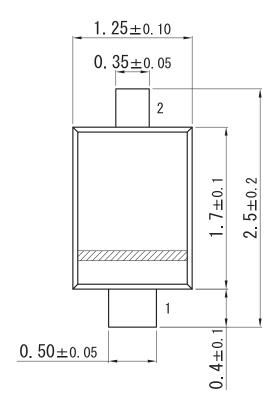


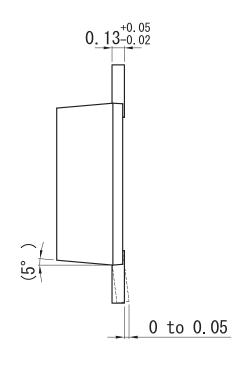


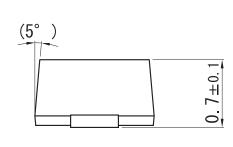
Ver. DED 2

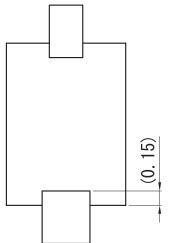
## SMini2-F5-B

Unit: mm

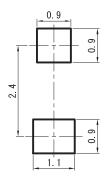








#### ■ Land Pattern (Reference) (Unit: mm)



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