# DB2J313

## Silicon epitaxial planar type

#### For small current rectification

#### Features

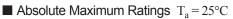
- $\bullet$  Low forward voltage  $V_{\rm F}$  and small reverse current  $I_{\rm R}$
- Low terminal capacitance C<sub>t</sub>
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

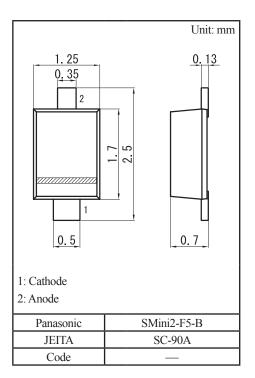
#### Marking Symbol: BD

#### Packaging

DB2J31300L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

Parameter	Symbol	Rating	Unit	
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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>	200	mA	
Peak forward current	I <sub>FM</sub>	300	mA	
Non-repetitive peak forward surge current $^{*1}$	I <sub>FSM</sub>	1	А	
Junction temperature	Tj	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)

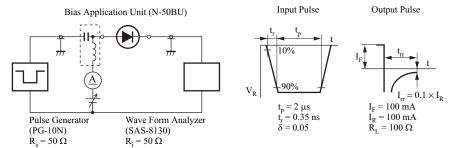
#### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

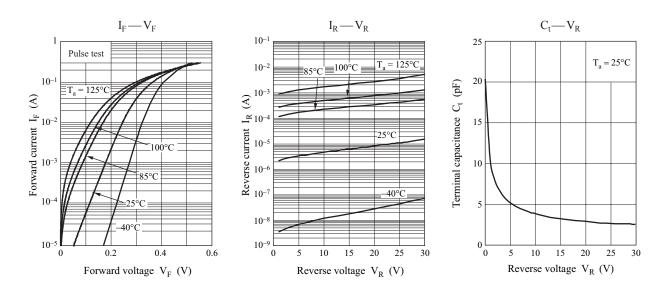
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 200 \text{ mA}$			0.55	V
Reverse current	I <sub>R</sub>	$V_R = 30 V$			50	μΑ
Terminal capacitance	Ct	$V_{R} = 10 V, f = 1 MHz$		3.8		pF
Reverse recovery time *1	t <sub>rr</sub>	$\begin{split} I_F = I_R = 100 \text{ mA}, \ I_{rr} = 0.1 \times I_R \ , \\ R_L = 100 \ \Omega \end{split}$		1.5		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.

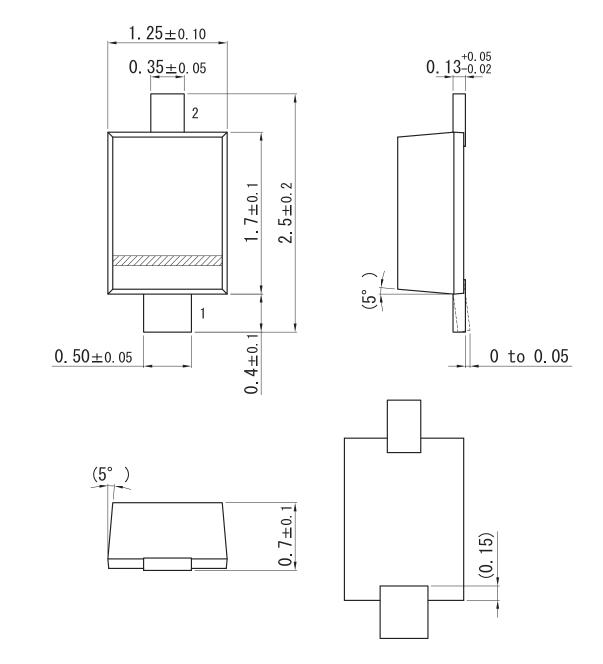
- 3. Absolute frequency of input and output is 1 GHz
  - \*1: t<sub>rr</sub> measurement circuit



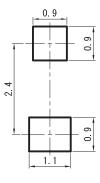


Unit: mm

SMini2-F5-B



Land Pattern (Reference) (Unit: mm)



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