## **DB3J316F**

## Silicon epitaxial planar type

For small current rectification DB3X316F in SMini3 type package

#### ■ 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: 5K

### ■ Basic Part Number

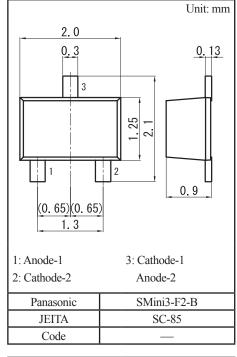
Dual DB2S316 (Series)

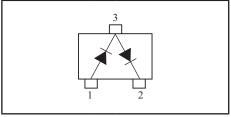
### Packaging

DB3J316F0L 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)	Single		100	mA	
	Series	$I_{F(AV)}$	70		
Peak forward current	Single		300	mA	
	Series	$I_{FM}$	200		
Non-repetitive peak forward surge current *1		I <sub>FSM</sub>	1	A	
Junction temperature		T <sub>j</sub> 125		°C	
Operating ambient temperature		T <sub>opr</sub> -40 to +85		°C	
Storage temperature		T <sub>stg</sub>	-55 to +125	°C	



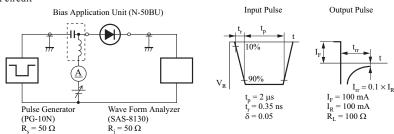


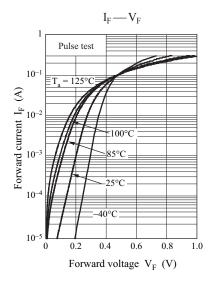
Note) \*1: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

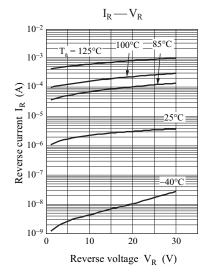
## ■ Electrical Characteristics $T_a = 25$ °C±3°C

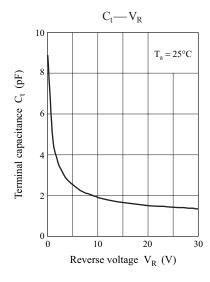
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 100 \text{ mA}$			0.55	V
Reverse current	$I_R$	$V_R = 30 \text{ V}$			15	μΑ
Terminal capacitance	Ct	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		2		pF
Reverse recovery time *1	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$		0.8		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<sub>rr</sub> measurement circuit





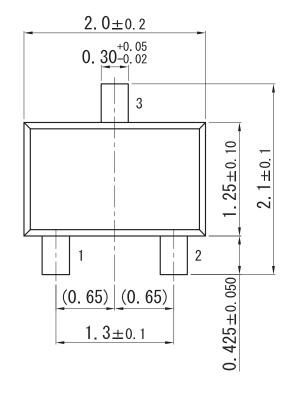


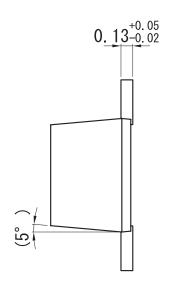


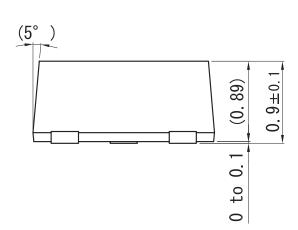
Ver. CED 2

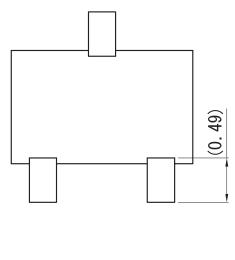
## SMini3-F2-B

Unit: mm

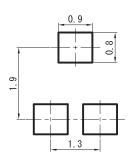








### ■ Land Pattern (Reference) (Unit: mm)



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