# **DB4X313K**

## Silicon epitaxial planar type

#### For small current rectification

#### Features

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

#### ■ Marking Symbol: 4J

#### ■ Basic Part Number

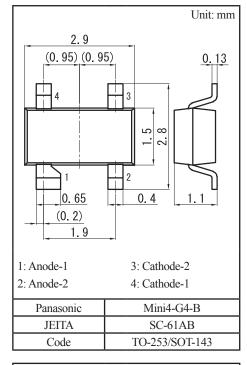
Dual DB2J313 (Parallel)

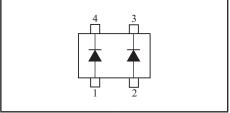
#### Packaging

DB4X313K0R 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	т	200	mA	
	Double *1	$I_{F(AV)}$	130		
Peak forward current	Single	T	300	mA	
	Double *1	$I_{FM}$	220		
Non-repetitive peak forward	Single	T	1.0	A	
surge current *2	Double *1	I <sub>FSM</sub>	0.7		
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: Value of each diode in double diodes used.

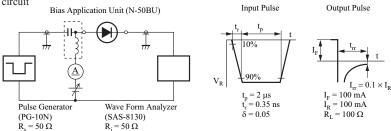
### ■ Electrical Characteristics $T_a = 25$ °C±3°C

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

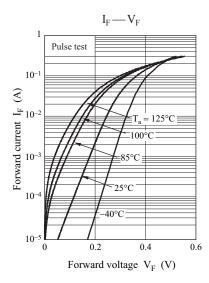
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

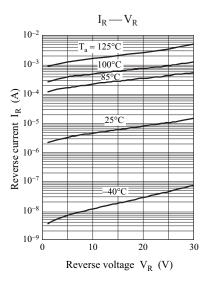
- 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
- 3. Absolute frequency of input and output is 1 GHz

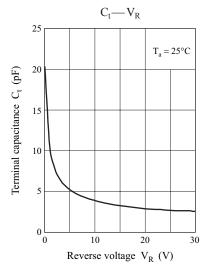
4. \*1:  $t_{rr}$  measurement circuit



<sup>\*2: 50</sup> Hz sine wave 1 cycle (Non-repetitive peak current)



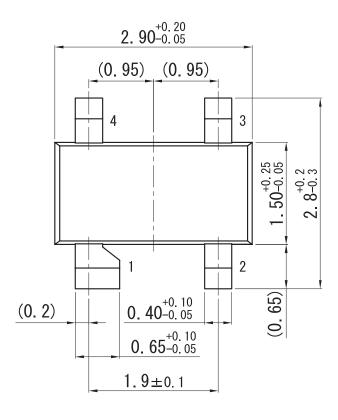


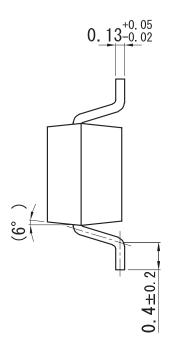


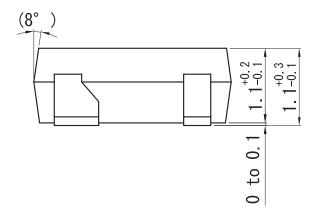
Ver. CED 2

Mini4-G4-B

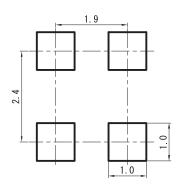
Unit: mm







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



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