# **DB4X313F**

# Silicon epitaxial planar type

For small current rectification

#### ■ Features

- $\bullet$  Low forward voltage  $V_F$  and small reverse current  $I_R$
- Low terminal capacitance C<sub>t</sub>
- Halogen-free / RoHS compliant
   (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

#### ■ Marking Symbol: 4Q

#### ■ Basic Part Number

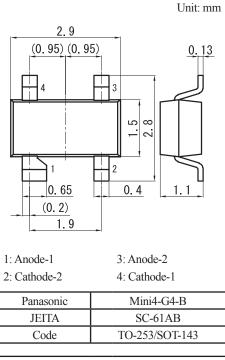
Dual DB2J313 (Parrarel, oppositely arranged)

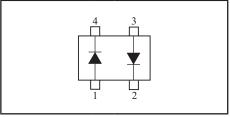
#### Packaging

DB4X313F0R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

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

Parameter	Symbol	mbol Rating			
Reverse voltage		V <sub>R</sub>	30	V	
Repetitive peak reverse voltage		V <sub>RRM</sub>	30	V	
Forward current (Average)	Single	T	200	mA	
	Series	$I_{F(AV)}$	130		
Peak forward current	Single	T	300	mA	
	Series	I <sub>FM</sub>	220		
Non-repetitive peak forward surge current *1	Single		1.0	A	
	Series	$I_{FSM}$	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	



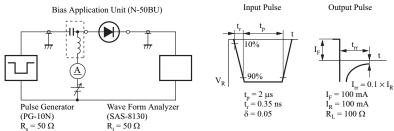


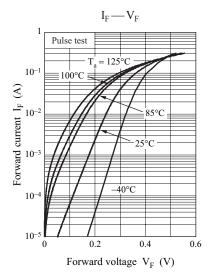
Note) \*1: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

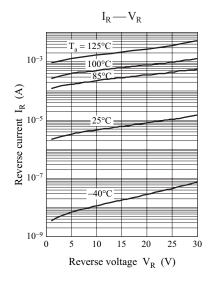
### ■ Electrical Characteristics $T_a = 25$ °C±3°C

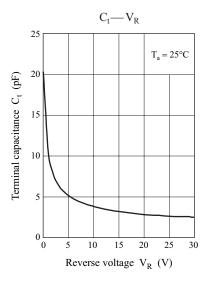
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 200 \text{ mA}$			0.55	V
Reverse current	$I_R$	$V_R = 30 \text{ V}$			50	μΑ
Terminal capacitance	C <sub>t</sub>	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		3.8		pF
Reverse recovery time *1	t <sub>rr</sub>	$I_F = I_R = 100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





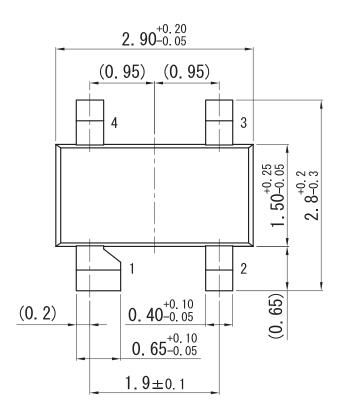


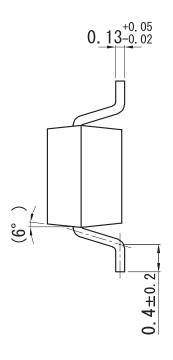


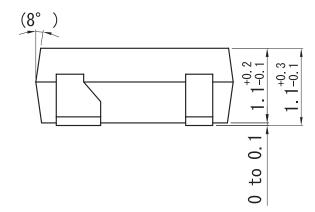
Ver. DED 2

Mini4-G4-B

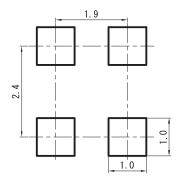
Unit: mm







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



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