## **DB2X201**

### Silicon epitaxial planar type

For high frequency rectification DB3X201K in Mini2 type package

#### ■ Features

- ullet Small reverse current  $I_R$
- ullet Low forward voltage  $V_F$
- Halogen-free / RoHS compliant
   (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

#### ■ Marking Symbol: B2

#### ■ Packaging

DB2X20100L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

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

Parameter	Symbol	Rating	Unit	
Reverse voltage	$V_R$	20	V	
Repetitive peak reverse voltage	V <sub>RRM</sub>	20	V	
Forward current (Average)	I <sub>F(AV)</sub>	500	mA	
Non-repetitive peak forward surge current *1	I <sub>FSM</sub>	3	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)

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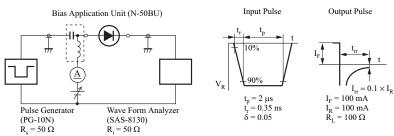
Code

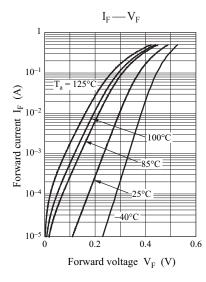
SOD-123

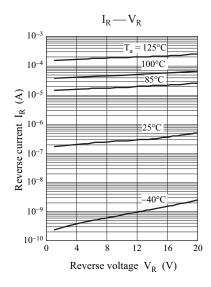
#### ■ Electrical Characteristics $T_a = 25$ °C±3°C

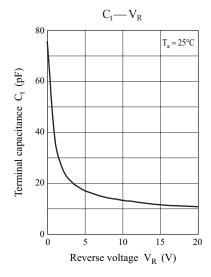
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F1</sub>	$I_F = 10 \text{ mA}$			0.4	V
	V <sub>F2</sub>	$I_F = 500 \text{ mA}$			0.55	
Reverse current -	I <sub>R1</sub>	$V_R = 5 \text{ V}$			1	μА
	I <sub>R2</sub>	$V_R = 10 \text{ V}$			10	
Terminal capacitance	Ct	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		12		pF
Reverse recovery time *1	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$		4.3		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 400 MHz
  - 4. \*1: t<sub>rr</sub> measurement circuit





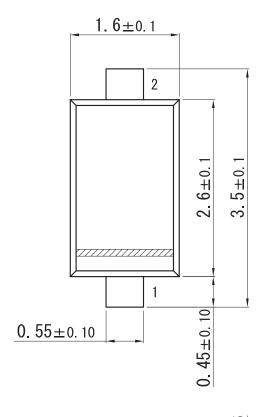


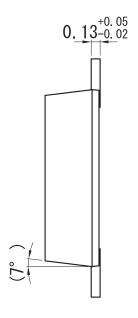


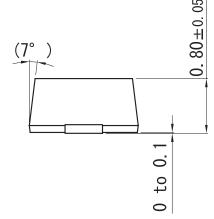
Ver. CED 2

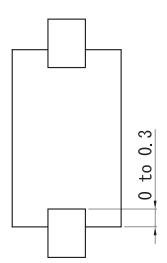
Mini2-F4-B

Unit: mm

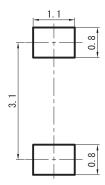








#### ■ Land Pattern (Reference) (Unit: mm)



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