# **DB3X315E**

### Silicon epitaxial planar type

For high speed switching circuits

#### ■ Features

- Short reverse recovery time t<sub>rr</sub>
- Small reverse current I<sub>R</sub>
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

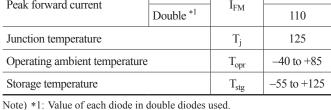
#### ■ Marking Symbol: 5D

#### ■ Packaging

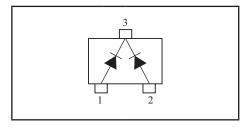
DB3X315E0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

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

Parameter		Symbol	Rating	Unit	
Reverse voltage		V <sub>R</sub>	30	V	
Maximum peak reverse voltage		$V_{RM}$	30	V	
Forward current	Single	,	30	mA	
	Double *1	$I_{\mathrm{F}}$	20		
Peak forward current	Single		150	mA	
	Double *1	$I_{FM}$	110		
Junction temperature		T <sub>j</sub> 125		°C	
Operating ambient temperature		T <sub>opr</sub>	T <sub>opr</sub> -40 to +85		
Storage temperature		T <sub>stg</sub>	-55 to +125	°C	



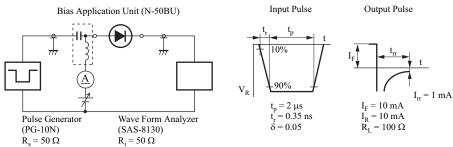
## Unit: mm 2.9 0.4 0.16 .5 (0.95)(0.95)1: Anode-1 3: Cathode-1 2: Anode-2 Cathode-2 Mini3-G3-B Panasonic **JEITA** SC-59A TO-236AA/SOT-23 Code

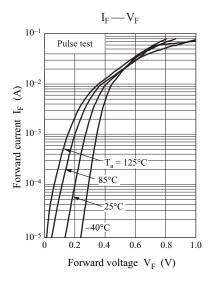


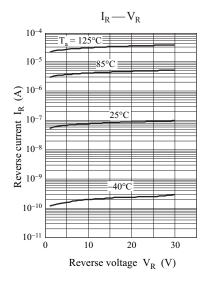
#### ■ Electrical Characteristics $T_a = 25$ °C±3°C

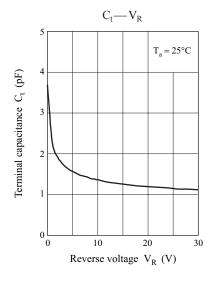
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 1 \text{ mA}$			0.4	V
	$V_{F2}$	$I_F = 30 \text{ mA}$			1.0	
Reverse current	$I_R$	$V_R = 30 \text{ V}$			300	nA
Terminal capacitance	Ct	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		1.4		pF
Reverse recovery time *1	t <sub>rr</sub>	$I_F = I_R = 10 \text{ mA}, I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$		1.0		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 2 GHz
    - \*1: t<sub>rr</sub> measurement circuit





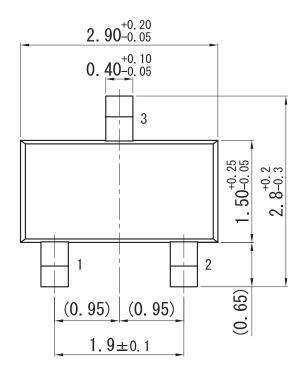


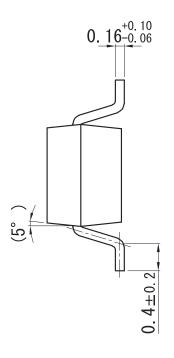


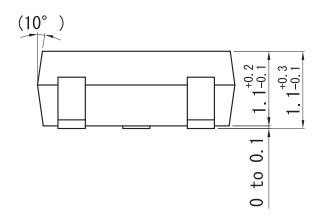
Ver. DED 2

Mini3-G3-B

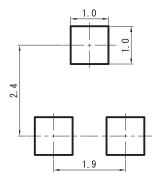
Unit: mm







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



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